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=> e barletta raul b/au

E1 2 BARLETTA RALPH/AU  
E2 3 BARLETTA RAUL/AU  
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E4 32 BARLETTA RAUL G/AU  
E5 1 BARLETTA RAUL GERARDO/AU  
E6 2 BARLETTA ROBERT/AU  
E7 15 BARLETTA ROBERT E/AU  
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PROCESSING COMPLETED FOR L1

L2 26 DUP REM L1 (10 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 26 ANSWERS - CONTINUE? Y/(N):y

L2 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 2002:168969 CAPLUS

TI The immunogenicity of *Mycobacterium paratuberculosis* 85B antigen

AU Mullerad, Jacob; Michal, Israel; Fishman, Yolanta; Hovav, Avi-Hai;

\*\*\*Barletta, Raul G.\*\*\* ; Bercovier, Herve

CS Hadassah Medical School, Department of Clinical Microbiology, The Hebrew University, Jerusalem, P.O.B., 12272, Israel

SO Medical Microbiology and Immunology (2002), 190(4), 179-187

CODEN: MMIYAO; ISSN: 0300-8584

PB Springer-Verlag

DT Journal

LA English

AB *Mycobacterium paratuberculosis* (MPT) is the etiol. agent of paratuberculosis. The disease is prevalent throughout the world, and exacts a heavy financial toll. At present, the only means of controlling this disease are culling or vaccination. The existing vaccines are not very efficient and produce a long-lasting local reaction at the point of injection and induce antibodies/delayed-type hypersensitivity (DTH) reaction that cannot be differentiated from those of naturally infected animals. New potent acellular vaccines that allow discrimination between infected and vaccinated animals are necessary to improve the control of this disease. We have isolated, overexpressed and purified the 85B antigen of MPT, and characterized the immune response induced by this antigen in mice. Our results showed that the recombinant MPT 85B (rMPT 85B) antigen induced a high prodn. of interferon (IFN).gamma., interleukin (IL)-6, IL-10 and nitric oxide (NO). Spleen cells from mice immunized with rMPT 85B in Ribi adjuvant produced a higher level of IL-10 and NO than spleen cells of mice immunized with rMPT 85B only. In contrast, the addn. of Ribi to the immunization protocol resulted in a lower amt. of IFN.gamma. released by spleen cells. The levels of spleen cells proliferation in mice vaccinated with the rMPT 85B protein alone or with rMPT 85B with Ribi adjuvant were, resp., four times or five times greater

than in the control mice. The Ribi adjuvant induced significantly higher anti-85B antibody prodn. of all classes tested and increased the IgG1/IgG2a ratio. DTH responses in mice footpads were obsd. only in mice immunized with rMPT 85B emulsified in Ribi. rMPT 85B induced both a Th1 and Th2 type of immune response with the later slightly more pronounced when the vaccination protocol comprised Ribi as an adjuvant. The rMPT 85B antigen elicited a strong immune response and can be considered as a potential candidate for a future acellular vaccine.

L2 ANSWER 2 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

1

AN 2002:68673 BIOSIS

DN PREV200200068673

TI Mycobacterium smegmatis D-alanine racemase mutants are not dependent on D-alanine for growth.

AU Chacon, Ofelia; Feng, Zhengyu; Harris, N. Beth; Caceres, Nancy E.; Adams, L. Garry; \*\*\*Barletta, Raul G. (1)\*\*\*

CS (1) Department of Veterinary and Biomedical Sciences, University of Nebraska, 211 VBS, Fair St. and East Campus Loop, Lincoln, NE, 68583-0905:  
rbarletta@unl.edu USA

SO Antimicrobial Agents and Chemotherapy, (January, 2002) Vol. 46, No. 1, pp. 47-54. <http://aac.asm.org/>. print.

ISSN: 0066-4804.

DT Article

LA English

AB Mycobacterium smegmatis is a fast-growing nonpathogenic species particularly useful in studying basic cellular processes of relevance to pathogenic mycobacteria. This study focused on the D-alanine racemase gene (*alrA*), which is involved in the synthesis of D-alanine, a basic component of peptidoglycan that forms the backbone of the cell wall. *M. smegmatis* *alrA* null mutants were generated by homologous recombination using a kanamycin resistance marker for insertional inactivation. Mutants were selected on Middlebrook medium supplemented with 50 mM D-alanine and 20 mug of kanamycin per ml. These mutants were also able to grow in standard and minimal media without D-alanine, giving rise to colonies with a drier appearance and more-raised borders than the wild-type strain. The viability of the mutants and independence of D-alanine for growth indicate that inactivation of *alrA* does not impose an auxotrophic requirement for D-alanine, suggesting the existence of a new pathway of D-alanine biosynthesis in *M. smegmatis*. Biochemical analysis demonstrated the absence of any detectable D-alanine racemase activity in the mutant strains. In addition, the *alrA* mutants displayed hypersusceptibility to the antimycobacterial agent D-cycloserine. The MIC of D-cycloserine for the mutant strain was 2.56 mug/ml, 30-fold less than that for the wild-type strain. Furthermore, this hypersusceptibility was confirmed by the bactericidal action of D-cycloserine on broth cultures. The kinetic of killing for the mutant strain followed the same pattern as that for the wild-type strain, but at a 30-fold-lower drug concentration. This effect does not involve a change in the permeability of the cell wall by this drug and is consistent with the identification of D-alanine racemase as a target of D-cycloserine. This outcome is of importance for the design of novel antituberculosis drugs targeting peptidoglycan biosynthesis in mycobacteria.

L2 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 2001:526210 CAPLUS

DN 135:117904

TI Identification of virulence determinants

IN \*\*\*Barletta, Raul G.\*\*\* ; Harris, N. Beth

PA The Board of Regents of the University of Nebraska, USA

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2001051649 A2 20010719 WO 2001-US980 20010111

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
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BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-175433P P 20000111

AB Disclosed are methods for the detn. of virulence determinants in bacteria  
and in particular bacteria of the genus *Mycobacterium*. Also disclosed are  
compns. and methods for stimulating an immune response in an animal using  
bacteria and virulence determinants identified by the methods of the  
present invention.

L2 ANSWER 4 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

2

AN 2001:475402 BIOSIS

DN PREV200100475402

TI *Mycobacterium avium* subsp. *paratuberculosis* in veterinary medicine.

AU Harris, N. Beth; \*\*\*Barletta, Raul G. (1)\*\*\*

CS (1) Department of Veterinary and Biomedical Sciences, University of  
Nebraska-Lincoln, Rm 211, VBS Bldg., Lincoln, NE, 68583-0905:  
[rbarletta@unl.edu](mailto:rbarletta@unl.edu) USA

SO Clinical Microbiology Reviews, (July, 2001) Vol. 14, No. 3, pp. 489-512.  
print.

ISSN: 0893-8512.

DT General Review

LA English

SL English

L2 ANSWER 5 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 2001:492494 BIOSIS

DN PREV200100492494

TI Identification of a secreted superoxide dismutase in *Mycobacterium avium*  
ssp. *paratuberculosis*.

AU Liu, Xiaofei; Feng, Zhengyu; Harris, N. Beth; Cirillo, Jeffrey D.;  
Bercovier, Herve; \*\*\*Barletta, Raul G. (1)\*\*\*

CS (1) Department of Veterinary and Biomedical Sciences, University of  
Nebraska, 211 VBS, Fair and East Campus Loop, Lincoln, NE, 68583-0905:  
[rbarletta@unl.edu](mailto:rbarletta@unl.edu) USA

SO FEMS Microbiology Letters, (21 August, 2001) Vol. 202, No. 2, pp. 233-238.  
print.

ISSN: 0378-1097.

DT Article

LA English

SL English

AB *Mycobacterium avium* ssp. *paratuberculosis* (*M. paratuberculosis*), the  
causative agent of Johne's disease, is an important animal pathogen that  
has also been implicated in human disease. The major proteins expressed by  
*M. paratuberculosis* were analyzed by two-dimensional gel electrophoresis,  
and a superoxide dismutase (Sod) was identified from this protein profile.  
The *M. paratuberculosis* Sod has a molecular mass of 23 kDa and an

isoelectric point of 6.1. Sequence analysis of the corresponding sodA gene from *M. paratuberculosis* indicates that this protein is a manganese-dependent enzyme. We show that the *M. paratuberculosis* Sod is actively secreted, suggesting that it may elicit a protective cellular immune response in the host during infection.

L2 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:509955 CAPLUS  
DN 134:99219  
TI Vaccines against intracellular pathogens  
AU \*\*\*Barletta, Raul G.\*\*\* ; Donis, Ruben O.; Chacon, Ofelia; Shams, Homayoun; Cirillo, Jeffrey D.  
CS Department of Veterinary and Biomedical Sciences, University of Nebraska, Lincoln, NE, 68583, USA  
SO Subcellular Biochemistry (2000), 33(Bacterial Invasion into Eukaryotic Cells), 559-599  
CODEN: SBCBAG; ISSN: 0306-0225  
PB Kluwer Academic/Plenum Publishers  
DT Journal; General Review  
LA English  
AB A review with approx. 200 refs. Vaccination against intracellular pathogens presents unique problems that are specific to the growth environment used by these organisms. For all vaccines it is important to det. the best antigen(s) and inoculation method that will induce the proper strength and type of immune response as well as protect against subsequent challenge. With intracellular pathogens, however, the need for a cell-mediated immune response, limited direct access of the immune system to the infectious agent and potential for control of antigen processing and presentation in the host cell by the pathogen make vaccine design even more complex. The majority of the vaccines in use today, including those used for intracellular pathogens, were developed using traditional methods and the efficacies and inoculation methods detd. empirically. The advent of mol. biol. and the development of a better understanding of the mechanisms of immune protection should allow a more directed approach to vaccine design. Using *Salmonella* and mycobacteria as model intracellular pathogens, the authors review recent advances in the understanding of potential mechanisms of immune protection and methods of vaccine design and delivery. The authors propose directions for further study and strategies for the design and delivery of vaccines against intracellular pathogens based on current technol.

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ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 7 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
3  
AN 1999:104436 BIOSIS  
DN PREV199900104436  
TI Development of a firefly luciferase-based assay for determining antimicrobial susceptibility of *Mycobacterium avium* subsp. *paratuberculosis*.  
AU Williams, Stephanie L.; Harris, N. Beth (1); \*\*\*Barletta, Raul G.\*\*\*  
CS (1) Dep. Vet. Biomed. Sci., Univ. Nebraska-Lincoln, Lincoln, NE 68583-0905 USA  
SO Journal of Clinical Microbiology, (Feb., 1999) Vol. 37, No. 2, pp. 304-309.  
ISSN: 0095-1137.  
DT Article  
LA English  
AB Paratuberculosis (Johne's disease) is a fatal disease of ruminants for which no effective treatment is available. Presently, no drugs against *Mycobacterium avium* subsp. *paratuberculosis* (*M. paratuberculosis*), the

causative agent of Johne's disease, are approved for use in livestock. Additionally, *M. paratuberculosis* has been linked to a human chronic granulomatous ileitis (Crohn's disease). To assist in the evaluation of antimicrobial agents with potential activity against *M. paratuberculosis*, we have developed a firefly luciferase-based assay for the determination of drug susceptibilities. The microorganism used was *M. paratuberculosis* K-10(pYUB180), a clinical isolate carrying a plasmid with the firefly luciferase gene. The MICs determined by the broth macrodilution method were as follows: amikacin, 2 mug/ml; Bay y 3118, 0.015 mug/ml; clarithromycin, 1.25 mug/ml; D-cycloserine, 25 mug/ml; ethambutol, 20 mug/ml; and rifabutin, 0.5 mug/ml. The strain was resistant to isoniazid and kanamycin. The results obtained by the luciferase assay were identical or fell within 1 doubling dilution. These results suggest that a combination of amikacin, clarithromycin, and rifabutin may be the most efficacious therapy for the treatment of *M. paratuberculosis* infections and that the use of fluoroquinolone class of antibiotics deserves further consideration. We demonstrate that the luciferase drug susceptibility assay is reliable for *M. paratuberculosis* and gives results within 7 days, whereas the broth macrodilution method requires 14 days.

L2 ANSWER 8 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

4

AN 1999:309795 BIOSIS  
DN PREV199900309795

TI Development of a transposon mutagenesis system for *Mycobacterium avium* subsp. *paratuberculosis*.

AU Harris, N. Beth; Feng, Zhengyu; Liu, Xiaofei; Cirillo, Suat L. G.; Cirillo, Jeffrey D.; \*\*\*Barletta, Raul G. (1)\*\*\*

CS (1) Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, NB, 68583-0905 USA

SO FEMS Microbiology Letters, (June 1, 1999) Vol. 175, No. 1, pp. 21-26.  
ISSN: 0378-1097.

DT Article

LA English

SL English

AB *Mycobacterium avium* subspecies *paratuberculosis*, a slow-growing *Mycobacterium*, is the causative agent of Johne's disease. Although *M. paratuberculosis* is difficult to manipulate genetically, our laboratory has recently demonstrated the ability to introduce DNA into these bacteria by transformation and phage infection. In the current study we develop the first transposon mutagenesis system for *M. paratuberculosis* using the conditionally replicating mycobacteriophage phiAE94 to introduce the mycobacterial transposon Tn5367. Southern blotting and sequence analysis demonstrated that the transposon insertion sites are distributed relatively randomly throughout the *M. paratuberculosis* genome. We constructed a comprehensive bank of 5620 insertion mutants using this transposon. The transposition frequency obtained using this delivery system was 1.0 X 10<sup>-6</sup> transposition events per recipient cell. Auxotrophic mutants were observed in this library at a frequency of 0.3%.

L2 ANSWER 9 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

5

AN 1998:481328 BIOSIS  
DN PREV199800481328

TI Pathogenicity of an enterotoxigenic *Escherichia coli*, hemolysin (hlyA) mutant in gnotobiotic piglets.

AU Moxley, Rodney A. (1); Berberov, Emil M.; Francis, David H.; Xing, Jun; Moayeri, Mahtab; Welch, Rodney A.; Baker, Diane R.; \*\*\*Barletta, Raul\*\*\*  
\*\*\* G. \*\*\*

CS (1) 111 VBS, Univ. Nebraska-Lincoln, Fair St. and East Campus Loop,  
Lincoln, NE 68583-0905 USA

SO Infection and Immunity, (Oct., 1998) Vol. 66, No. 10, pp. 5031-5035.

ISSN: 0019-9567.

DT Article

LA English

AB Pigs infected with hemolytic F4+ strains of enterotoxigenic Escherichia coli often develop septicemia secondary to intestinal infection. We tested the hypothesis that inactivation of hemolysin would reduce the ability of F4+ enterotoxigenic E. coli to cause septicemia in swine following oral inoculation. Inactivation of the hemolysin structural gene (*hlyA*) did not decrease the incidence of septicemia in the gnotobiotic piglet model.

L2 ANSWER 10 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1998:418174 BIOSIS

DN PREV199800418174

TI Novel and unique membrane protein of *Mycobacterium smegmatis* confers resistance to D-cycloserine.

AU Caceres, Nancy E.; Feng, Zhengyu; Li, Ling-Ling; Kapur, Vivek; Cirillo, Jeffrey D.; \*\*\*Barletta, Raul\*\*\*

CS Dep. Vet. and Biomedical. Sci., Univ., Nebraska Lincoln, NE USA

SO Abstracts of the General Meeting of the American Society for Microbiology, (1998) Vol. 98, pp. 498.

Meeting Info.: 98th General Meeting of the American Society for Microbiology Atlanta, Georgia, USA May 17-21, 1998 American Society for Microbiology  
. ISSN: 1060-2011.

DT Conference

LA English

L2 ANSWER 11 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

6

AN 1999:1300 BIOSIS

DN PREV199900001300

TI Regulation of the *Escherichia coli* sheA gene and characterization of its encoded hemolytic activity.

AU Fernandez, Sandra V.; Xing, Jun; Kapur, Vivek; Libby, Stephan J.; \*\*\*Barletta, Raul G.\*\*\* ; Moxley, Rodney A. (1)

CS (1) Dep. Vet. and Biomed. Sci., Agric. Res. Div., Inst. Agric. and Nat. Resources, Univ. Nebr.-Lincoln, Lincoln, NE 68583-0905 USA

SO FEMS Microbiology Letters, (Nov. 1, 1998) Vol. 168, No. 1, pp. 85-90.  
ISSN: 0378-1097.

DT Article

LA English

AB *Escherichia coli* K-12 carries the cryptic hemolysin gene sheA which is under the control of positive and negative transcriptional regulators. The objectives of the present study were to further analyze the regulation of the sheA gene in *E. coli*, to compare the sheA genes from *E. coli* K-12 and a pathogenic *E. coli* strain, and to characterize the SheA hemolytic activity. Northern blot analysis demonstrated that the transcriptional regulator SlyA activates the *E. coli* K-12 sheA gene. The main transcriptional start site of the sheA gene was 56 nucleotides upstream from the start codon as determined by primer extension analysis. The sheA genes from *E. coli* K-12 and a pathogenic *E. coli* strain were identical. SheA hemolytic activity was cell associated and Ca<sup>2+</sup> independent.

L2 ANSWER 12 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

7

AN 1997:414391 BIOSIS

DN PREV199799706434

TI Overexpression of the D-alanine racemase gene confers resistance to D-cycloserine in *Mycobacterium smegmatis*.

AU Caceres, Nancy E.; Harris, N. Beth; Wellehan, James F.; Feng, Zhengyu;

Kapur, Vivek; \*\*\*Barletta, Raul G. (1)\*\*\*  
CS (1) Dep. Veterinary Biomedical Sci., 211 VBS, Fair St. and East Campus  
Loop, Univ. Nebraska, Lincoln, NE 68583-0905 USA  
SO Journal of Bacteriology, (1997) Vol. 179, No. 16, pp. 5046-5055.  
ISSN: 0021-9193.

DT Article

LA English

AB D-Cycloserine is an effective second-line drug against *Mycobacterium avium* and *Mycobacterium tuberculosis*. To analyze the genetic determinants of D-cycloserine resistance in mycobacteria, a library of a resistant *Mycobacterium smegmatis* mutant was constructed. A resistant clone harboring a recombinant plasmid with a 3.1-kb insert that contained the glutamate decarboxylase (*gadA*) and D-alanine racemase (*alrA*) genes was identified. Subcloning experiments demonstrated that *alrA* was necessary and sufficient to confer a D-cycloserine resistance phenotype. The D-alanine racemase activities of wild-type and recombinant *M. smegmatis* strains were inhibited by D-cycloserine in a concentration-dependent manner. The D-cycloserine resistance phenotype in the recombinant clone was due to the overexpression of the wild-type *alrA* gene in a multicopy vector. Analysis of a spontaneous resistant mutant also demonstrated overproduction of wild-type AlrA enzyme. Nucleotide sequence analysis of the overproducing mutant revealed a single transversion (G fwdarw T) at the *alrA* promoter, which resulted in elevated beta-galactosidase reporter gene expression. Furthermore, transformants of *Mycobacterium intracellulare* and *Mycobacterium bovis* BCG carrying the *M. smegmatis* wild-type *alrA* gene in a multicopy vector were resistant to D-cycloserine, suggesting that AlrA overproduction is a potential mechanism of D-cycloserine resistance in clinical isolates of *M. tuberculosis* and other pathogenic mycobacteria. In conclusion, these results show that one of the mechanisms of D-cycloserine resistance in *M. smegmatis* involves the overexpression of the *alrA* gene due to a promoter-up mutation.

L2 ANSWER 13 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

8

AN 1997:179847 BIOSIS

DN PREV199799471560

TI Identification of *Mycobacterium paratuberculosis* gene expression signals.

AU Bannantine, John P.; \*\*\*Barletta, Raul G.\*\*\* ; Thoen, Charles O.; Andrews, Robert E., Jr. (1)

CS (1) Dep. Microbiol., Immunol. Preventive Med., Iowa State Univ., Ames, IA 50011 USA

SO Microbiology (Reading), (1997) Vol. 143, No. 3, pp. 921-928.

ISSN: 1350-0872.

DT Article

LA English

AB *Mycobacterium paratuberculosis* promoter-containing clones were isolated from a genomic DNA library constructed in the transcriptional-translational fusion vector pYUB76. The promoter-containing DNA fragments were identified in the surrogate host *Mycobacterium smegmatis* by expression of the promoterless lacZ reporter gene of pYUB76. The expression signals exhibited a wide range of strengths, as indicated by their corresponding beta-galactosidase activities. Eight clones were sequenced and characterized further. Predicted open reading frames and codon usage were identified by computer analysis. Database searching for related sequences using the BLAST method revealed no homologies. Transcriptional activity was measured by slot-blot hybridization with steady-state RNA isolated from lacZ+ *M. smegmatis* clones. Primer extension analysis identified the transcription start sites within the cloned fragments. The promoter regions characterized in this study were used to establish a consensus promoter sequence for *M. paratuberculosis*. *M. paratuberculosis* consensus hexanucleotide sequences of TGMCGT and CGGCCS

centred approximately 35 and 10 bp upstream from the transcription startpoints do not correspond to the consensus hexanucleotides of Escherichia coli promoters.

L2 ANSWER 14 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

9

AN 1995:313533 BIOSIS

DN PREV199598327833

TI Phage infection, transfection and transformation of Mycobacterium avium complex and Mycobacterium paratuberculosis.

AU Foley-Thomas, Ellen M.; Whipple, Diana L.; Bermudez, Luiz E.; \*\*\*Barletta, Raul G. (1)\*\*\*

CS (1) Dep. Veterinary Biomedical Sci., Cent. Biotechnology, Univ. Nebraska, Lincoln, NE 68583-0905 USA

SO Microbiology (Reading), (1995) Vol. 141, No. 5, pp. 1173-1181.

ISSN: 1350-0872.

DT Article

LA English

AB Mycobacterium avium complex strains and Mycobacterium paratuberculosis are closely related intracellular pathogens affecting humans and animals. M. avium complex infections are a leading cause of morbidity and mortality in AIDS patients, and M. paratuberculosis is the agent of Johne's disease in ruminants. Genetic manipulation of these micro-organisms would facilitate the understanding of their pathogenesis, the construction of attenuated vaccine strains and the development of new drugs and treatment methods. This paper describes the replication of mycobacterial shuttle phasmids and plasmids, and the expression of the firefly luciferase reporter gene in M. avium complex and M. paratuberculosis. The mycobacteriophage TM4 propagated on M. smegmatis or M. paratuberculosis plaqued at the same efficiency on these two mycobacterial hosts. Screening of M. avium complex and M. paratuberculosis clinical isolates with TM4-derived luciferase reporter phages demonstrated that the majority of these isolates were susceptible to TM4. Conditions for introduction of DNA were determined by transfection of M. paratuberculosis with TM4 DNA and applied to isolate kanamycin-resistant transformants of M. avium complex and M. paratuberculosis with Escherichia coli-Mycobacterium shuttle plasmids. Recombinant plasmids were recovered from transformants without apparent loss of DNA sequences. These results provide the basis for the genetic manipulation of these pathogenic mycobacterial species.

L2 ANSWER 15 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1995:226193 BIOSIS

DN PREV199598240493

TI Bacterial vaccine vectors and bacillus Calmette-Guerin.

AU Cirillo, Jeffrey D.; Stover, C. Kendall; Bloom, Barry R.; Jacobs, William R., Jr.; \*\*\*Barletta, Raul G.\*\*\*

CS Dep. Veterinary Biomedical Sci., Cent. Biotechnology, Univ. Nebraska, Lincoln, NE 68583-0905 USA

SO Clinical Infectious Diseases, (1995) Vol. 20, No. 4, pp. 1001-1009.

ISSN: 1058-4838.

DT General Review

LA English

AB Recent advances in biotechnology now allow a more modern approach to the development of vaccines, particularly that of recombinant vaccines. Bacterial vaccine vectors have the advantage over viral vectors in that the former have the ability to express a greater number of antigens in different forms. Although no recombinant bacterial vaccines are currently in use, bacillus Calmette-Guerin (BCG), Salmonella species, and Escherichia coli are being developed as vaccine vectors. We review plasmid systems and mutant strains developed for the expression of foreign antigens, with particular emphasis on those developed for BCG. We describe

the development of antigen expression systems as well as the immune response elicited by recombinant BCG vaccine strains to bacterial and human immunodeficiency virus (HIV) antigens. A modified recombinant BCG carrier with selection for the stable maintenance of rDNA is proposed.

L2 ANSWER 16 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1993:317131 BIOSIS

DN PREV199396025481

TI Rapid assessment of drug susceptibilities of *Mycobacterium tuberculosis* by means of luciferase reporter phages.

AU Jacobs, William R., Jr. (1); \*\*\*Barletta, Raul G.\*\*\* ; Udani, Rupa; Chan, John; Kalkut, Gary; Sosne, Gabriel; Kieser, Tobias; Sarkis, Gary J.; Hatful, Graham F.; Bloom, Barry R.

CS (1) Howard Hughes Med. Inst., Albert Einstein College Med., Bronx, NY 10461 USA

SO Science (Washington D C), (1993) Vol. 260, No. 5109, pp. 819-822.

ISSN: 0036-8075.

DT Article

LA English

AB Effective chemotherapy of tuberculosis requires rapid assessment of drug sensitivity because of the emergence of multidrug-resistant *Mycobacterium tuberculosis*. Drug susceptibility was assessed by a simple method based on the efficient production of photons by viable mycobacteria infected with specific reporter phages expressing the firefly luciferase gene. Light production was dependent on phage infection, expression of the luciferase gene, and the level of cellular adenosine triphosphate. Signals could be detected within minutes after infection of virulent *M. tuberculosis* with reporter phages. Culture of conventional strains with antituberculosis drugs, including isoniazid or rifampicin, resulted in extinction of light production. In contrast, light signals after luciferase reporter phage infection of drug-resistant strains continued to be produced. Luciferase reporter phages may help to reduce the time required for establishing antibiotic sensitivity of *M. tuberculosis* strains from weeks to days and to accelerate screening for new antituberculosis drugs.

L2 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1992:122217 CAPLUS

DN 116:122217

TI Identification of expression signals of the mycobacteriophages Bxb1, L1 and TM4 using the Escherichia-Mycobacterium shuttle plasmids pYUB75 and pYUB76 designed to create translational fusions to the lacZ gene

AU \*\*\*Barletta, Raul G.\*\*\* ; Kim, David D.; Snapper, Scott B.; Bloom, Barry R.; Jacobs, William R., Jr.

CS Howard Hughes Med. Inst., Albert Einstein Coll. Med., Bronx, NY, 10461, USA

SO J. Gen. Microbiol. (1992), 138(1), 23-30

CODEN: JGMIAN; ISSN: 0022-1287

DT Journal

LA English

AB Mycobacterial expression signals were cloned using specially constructed gene fusion shuttle plasmid probes carrying a truncated *Escherichia coli* lacZ (.beta.-galactosidase) gene which lacked a promoter, a ribosome binding site, and an ATG start codon. Libraries of mycobacteriophage Bxb1, L1 and TM4 DNAs were constructed, and introduced by electroporation into *Mycobacterium smegmatis* and the bacille Calmette-Guerin (BCG). Clones carrying mycobacterial expression sequences were detected by their blue color or characteristic fluorescence when plated on media contg. chromogenic or fluorogenic substrates. Varying degrees of .beta.-galactosidase expression were obsd., and one Bxb1 expression signal was identified where .beta.-galactosidase expression is repressed in phage lysogens. The rate of transfer ranged from 5.2 .times. 10-11-1.1 .times.

10-18 mL per cell h-1, and averaged 1.3 .times. 10-15 mL per cell h-1. The results of these expts. suggest that the rates of conjugative transfer are far too low for plasmids to be maintained as parasites in their host populations. Infectious transfer is insufficient; plasmids must confer a selective advantage to their host to be maintained.

L2 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1993:74733 CAPLUS

DN 118:74733

TI A novel transposon trap for mycobacteria: isolation and characterization of IS1096

AU Cirillo, Jeffrey D.; \*\*\*Barletta, Raul G.\*\*\* ; Bloom, Barry R.; Jacobs, William R., Jr.

CS Dep. Microbiol. Immunol., Albert Einstein Coll. Med., Bronx, NY, 10461, USA

SO J. Bacteriol. (1991), 173(24), 7772-80

CODEN: JOBAAY; ISSN: 0021-9193

DT Journal

LA English

AB In the course of developing strategies to obtain a mutation in the aspartate semialdehyde dehydrogenase (asd) gene of *Mycobacterium smegmatis*, an efficient transposon trap was constructed which may be generally useful for the identification of transposable elements in mycobacteria. A DNA fragment contg. the asd gene was replaced with an aminoglycoside phosphotransferase gene (aph) to generate a .DELTA.asd::aph allele. Attempts to replace the wild-type asd gene with the .DELTA.asd::aph allele were unsuccessful, suggesting that this deletion was lethal to the growth of *M. smegmatis*. The plasmid, pYUB215, which contains .beta.-galactosidase expressed from a mycobacteriophage promoter and .DELTA.asd::aph, was integrated into the chromosome of *M. smegmatis* by a homologous, single-crossover, recombination event. Visual screening for inactivation of the .beta.-galactosidase gene in the resulting strain allowed the isolation of a novel mycobacterial insertion element from *M. smegmatis*. This insertion element, which is unique to *M. smegmatis*, was designated IS1096 and transposes at a frequency of 7.2 .times. 10-5 per cell in an apparently random fashion. IS1096 is 2275 bp in length and contains 2 open reading frames which are predicted to encode proteins involved in transposition. This insertion element exhibits several characteristics that suggest it may be a useful tool for genetic anal. of mycobacteria, possibly including the study of mechanisms of pathogenesis.

L2 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1992:167166 CAPLUS

DN 116:167166

TI Genetic systems for mycobacteria

AU Jacobs, William R., Jr.; Kalpana, Ganjam V.; Cirillo, Jeffrey D.; Pascopealla, Lisa; Snapper, Scott B.; Udani, Rupa A.; Jones, Wilbur; \*\*\*Barletta, Raul G.\*\*\* ; Bloom, Barry R.

CS Dep. Microbiol. Immunol., Howard Hughes Med. Inst., Bronx, NY, 10461, USA

SO Methods Enzymol. (1991), 204(Bact. Genet. Syst.), 537-55

CODEN: MENZAU; ISSN: 0076-6879

DT Journal; General Review

LA English

AB A review with 16 refs. on genetic techniques for manipulation of mycobacterial species. Topic discussed include: mycobacterial strains, biohazard considerations, growth & maintenance of mycobacteria, mycobacteria and shuttle plasmids, electroporation, insertional mutagenesis, and construction of libraries in shuttle cosmids.

L2 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1989:151091 CAPLUS

DN 110:151091

TI Impairment of melibiose utilization in *Streptococcus mutans* serotype c  
gtfA mutants

AU \*\*\*Barletta, Raul G.\*\*\* ; Curtiss, Roy, III

CS Dep. Microbiol., Univ. Alabama, Birmingham, AL, 35294, USA

SO Infect. Immun. (1989), 57(3), 992-5

CODEN: INFIBR; ISSN: 0019-9567

DT Journal

LA English

AB The *S. mutans* serotype c gtfA gene encodes a 55-kilodalton sucrose-hydrolyzing enzyme. Anal. of *S. mutans* gtfA mutants revealed that the mutant strains were specifically impaired in the ability to use melibiose as a sole C source. *S. mutans* gtfA mutant strains synthesized less .alpha.-galactosidase activity inducible by raffinose than wild-type strains. Melibiose (an inducer in wild-type strains) failed to induce significant levels of .alpha.-galactosidase in the mutant strains. Apparently, melibiose use by *S. mutans* requires the interaction of the GtfA enzyme, or another gene product under the control of the gtfA promoter, with other gene product(s) involved in melibiose transport or hydrolysis.

L2 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1988:88714 CAPLUS

DN 108:88714

TI Analysis of the virulence of *Streptococcus mutans* serotype C gtfA mutants in the rat model system

AU \*\*\*Barletta, Raul G.\*\*\* ; Michalek, Suzanne M.; Curtiss, Roy, III

CS Inst. Dent. Res., Univ. Alabama, Birmingham, AL, 35294, USA

SO Infect. Immun. (1988), 56(2), 322-30

CODEN: INFIBR; ISSN: 0019-9567

DT Journal

LA English

AB The *S. mutans* serotype C gtfA gene encodes a 55-kilodalton protein which catalyzes the synthesis of a small glucan (1.5 kilodaltons) from sucrose. To investigate the role of the GtfA enzyme in virulence, *S. mutans* gtfA mutants from three cariogenic serotype C strains were constructed. A plasmid that carried an erythromycin resistance determinant and an internal fragment of the gtfA gene but that was unable to replicate in streptococci was used to transform *S. mutans*. The erythromycin-resistant transformants carried a partial duplication of the internal gtfA fragment, because of the integration of plasmid sequences within the *S. mutans* gtfA gene, which also resulted in the inactivation of the gtfA gene. This was verified by Southern DNA hybridization anal. and Western blot studies of cellular protein exts. of the mutant strains with GtfA antiserum. Mutants were fully virulent in both germ-free and conventional rats. These results do not rule out the involvement of the GtfA protein in virulence. The GtfA enzyme may synthesize a primer for water-insol. glucans. Another *S. mutans* protein, presumably a glucosyltransferase, may have a similar function and, thus, may obscure the relevance of the GtfA enzyme in pathogenesis.

L2 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1989:71557 CAPLUS

DN 110:71557

TI Biochemistry, genetics, and role in virulence of glucosyltransferase A from *Streptococcus mutans*

AU \*\*\*Barletta, Raul Gerardo\*\*\*

CS Univ. Alabama, Birmingham, AL, USA

SO (1987) 179 pp. Avail.: Univ. Microfilms Int., Order No. DA8809562

From: Diss. Abstr. Int. B 1988, 49(4), 1012

DT Dissertation

LA English  
AB Unavailable

L2 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1983:570591 CAPLUS

DN 99:170591

TI Escherichia coli strains producing Streptococcus mutans proteins responsible for colonization and virulence

AU Curtiss, Roy, III; Holt, Robert G.; \*\*\*Barletta, Raul G.\*\*\* ; Robeson, James P.; Saito, Shigeno

CS Inst. Dent. Res., Univ. Alabama, Birmingham, AL, 35294, USA

SO Ann. N. Y. Acad. Sci. (1983), 409(Secretory Immune Syst.), 688-96

CODEN: ANYAA9; ISSN: 0077-8923

DT Journal

LA English

AB S. mutans Genes coding for cell-surface protein antigens were cloned and expressed in E. coli K-12 with pBR322 and pYA601 as plasmid vectors. Most of these cell-surface proteins were translocated across the E. coli cytoplasmic membrane into the periplasm. Monoclonal antibodies against the spaA and gtfA proteins produced from hybridomas were used to facilitate the purifn. of spaA and gtfA proteins by immunoabsorbent chromatog. The method should be useful for anal. of the immune responses to S. mutans and for the development of an effective anticaries vaccine.

L2 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1983:84350 CAPLUS

DN 98:84350

TI Expression of a Streptococcus mutans glucosyltransferase gene in Escherichia coli

AU Robeson, James P.; \*\*\*Barletta, Raul G.\*\*\* ; Curtiss, Roy, III

CS Inst. Dent. Res., Univ. Alabama, Birmingham, AL, 35294, USA

SO J. Bacteriol. (1983), 153(1), 211-21

CODEN: JOBAAY; ISSN: 0021-9193

DT Journal

LA English

AB Chromosomal DNA from S. mutans strain UAB90 (serotype c) was cloned into E. coli K-12. The clone bank was screened for any sucrose-hydrolyzing activity by selection for growth on raffinose in the presence of isopropyl-.beta.-D-thiogalactoside. A clone expressing an S. mutans glucosyltransferase [9031-48-5] was identified. The S. mutans DNA encoding this enzyme was a 1.73-kilobase fragment cloned into the HindIII site of plasmid pBR322. This gene was designated gtfA. The plasmid-encoded gtfA enzyme, a 55,000-mol.-wt. protein, was synthesized at 40% of the level of pBR322-encoded .beta.-lactamase in E. coli minicells. Using sucrose [57-50-1] as substrate, the gtfA enzyme catalyzed the formation of fructose [57-48-7] and a glucan [9012-72-0] with an apparent mol. wt. of 1500. The gtfA protein was detected in S. mutans cells with antibody raised against the cloned gtfA enzyme. Immunol. identical gtfA protein appeared to be present in S. mutans cells of serotypes c, e, and f, and a cross-reacting protein was made by serotype b cells. Proteins from serotype a, g, and d S. mutans cells did not react with antibody to gtfA enzyme. The gtfA activity was present in the periplasmic space of E. coli clones, since 15% of the total gtfA activity was released by cold osmotic shock and the clones were able to grow on sucrose as sole C source.

L2 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1984:545071 CAPLUS

DN 101:145071

TI Analysis of Streptococcus mutans virulence attributes using recombinant DNA and immunological techniques

AU Curtiss, Roy, III; Larrimore, Sylvia A.; Holt, Robert G.; Barrett, John F.; \*\*\*Barletta, Raul\*\*\* ; Murchison, Hettie H.; Michalek, Suzanne M.; Saito, Shigeno

CS Inst. Dent. Res., Univ. Alabama, Birmingham, AL, 35294, USA

SO Glucosyltransferases, Glucans, Sucrose Dent. Caries, [Workshop] (1983), Meeting Date 1982, 95-104. Editor(s): Doyle, R. J.; Ciardi, J. E.

Publisher: IRL, Washington, D. C.

CODEN: 51ZJAK

DT Conference

LA English

AB *S. mutans* Genes for carbohydrate utilization, glycosyltransferase, and surface protein antigens were cloned in suitable strains of *Escherichia coli* K-12 using recombinant DNA techniques. The recombinant *E. coli* strains express *S. mutans* genes exceedingly well and those *S. mutans* gene products that are normally on the cell surface of *S. mutans* are translocated across the *E. coli* cytoplasmic membrane into the periplasmic space. The *S. mutans* proteins synthesized by recombinant *E. coli* strains were purified to homogeneity and used to raise monospecific antibodies against each protein. These antibodies were used to characterize the amt., form, and location of the proteins in *S. mutans* and also to isolate *S. mutans* devoid of that particular protein. These *S. mutans* with specific known genetic defects were analyzed for attributes thought to be involved in virulence in in vitro assays and also evaluated for cariogenicity by infection of gnotobiotic rats. These procedures will ultimately give definitive information on the no. and specific functions of the gene products involved in *S. mutans* pathogenicity.

L2 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2002 ACS

AN 1982:67006 CAPLUS

DN 96:67006

TI Monoclonal versus heterogeneous anti-H-8 antibodies in the analysis of the antiphosphorylcholine response in BALB/c mice

AU Kearney, John F.; \*\*\*Barletta, Raul\*\*\* ; Quan, Zoe S.; Quintans, Jose

CS Dep. Microbiol., Univ. Alabama, Birmingham, AL, USA

SO Eur. J. Immunol. (1981), 11(11), 877-83

CODEN: EJIMAF; ISSN: 0014-2980

DT Journal

LA English

AB Biol. activities of monoclonal A/J antibodies to the T15 idiotype in BALB/c mice were compared to heterogeneous antibodies raised by conventional immunization procedures. Two monoclonal antibodies, AB1-2 and GB4-10, which are of the .gamma.1,.kappa. class, appeared to have identical specificities by binding criteria and reacted similarly to conventional antibodies in their abilities to induce neonatal suppression, inhibit plaque-forming cell induction by phosphorylcholine (PC) antigens, and to inhibit specifically anti-PC plaque-forming cells. However, in functional anal. of anti-PC responses in various strains of mice, discrepancies were noted in the T15 responses as defined by monoclonal antibodies and conventional antisera. This heterogeneity was also obsd. in adult mice suppressed with the GB4-10 monoclonal antibody. These animals eventually produced anti-PC response of AB1-2 idiotype but lacking the GB4-10 marker. These results show that the T15 IgM anti-PC response in BALB/c and other strains of mice is heterogeneous and probably consists of a family of clones. Particular clones can be precisely eliminated by the use of appropriate monoclonal antibodies, and the anti-PC response that eventually recovers is still T15+ but lacking the suppressed clones.

=> e harris n beth/au

E1 49 HARRIS N B/AU

E2 110 HARRIS N B W/AU

E3 13 --> HARRIS N BETH/AU  
E4 103 HARRIS N C/AU  
E5 1 HARRIS N COLIN/AU  
E6 248 HARRIS N D/AU  
E7 1 HARRIS N D B/AU  
E8 1 HARRIS N D C/AU  
E9 30 HARRIS N E/AU  
E10 24 HARRIS N F/AU  
E11 104 HARRIS N G/AU  
E12 1 HARRIS N G E/AU

=> s e1-e3 and mycobacter?

L3 46 ("HARRIS N B"/AU OR "HARRIS N B W"/AU OR "HARRIS N BETH"/AU)  
AND MYCOBACTER?

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PROCESSING COMPLETED FOR L3

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YOU HAVE REQUESTED DATA FROM 10 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1  
AN 2002:214413 CAPLUS

TI Cell sorting of formalin-treated pathogenic \*\*\*Mycobacterium\*\*\*  
paratuberculosis expressing GFP

AU \*\*\*Harris, N. B.\*\*\* ; Zinniel, D. K.; Hsieh, M. K.; Cirillo, J. D.;  
Barletta, R. G.

CS University of Nebraska, Lincoln, NE, 68583-0905, USA

SO BioTechniques (2002), 32(3), 522-524,526-527

CODEN: BTNQDO; ISSN: 0736-6205

PB Eaton Publishing Co.

DT Journal

LA English

AB GFP is widely used as a mol. tool for the study of microbial pathogens.

However, the manipulation of these pathogenic microorganisms poses a health threat to the lab. worker, requiring biosafety level II or III containment. Although the GFP fluorophore is tolerant to formalin, a thorough anal. of this treatment on fluorescent output in prokaryotic systems has not been described. In addn., the anal. of microorganisms expressing GFP often depends on specialized equipment, which may not be housed in biosafety level II or III labs. Therefore, we sought to develop a safe and effective method for manipulating the GFP-expressing pathogenic bacterium \*\*\*Mycobacterium\*\*\* avium subsp. paratuberculosis (M. paratuberculosis) utilizing a formalin treatment that would permit the anal. of GFP fluorescence without requiring stringent biosafety containment. We demonstrate that formalin-treated M. paratuberculosis expresses 50% less fluorescence than viable cells, but this redn. is still compatible with spectrofluorometry and cell sorting. Furthermore, plasmid DNA that expresses GFP can be recovered efficiently from nonviable, sorted fluorescent cells. This approach is flexible, provides an addnl. margin of safety for lab. personnel, and can be easily applied to other pathogenic microorganisms expressing GFP.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
2

AN 2002:68673 BIOSIS

DN PREV200200068673

TI \*\*\*Mycobacterium\*\*\* smegmatis D-alanine racemase mutants are not

dependent on D-alanine for growth.

AU Chacon, Ofelia; Feng, Zhengyu; \*\*\*Harris, N. Beth\*\*\* ; Caceres, Nancy E.; Adams, L. Garry; Barletta, Raul G. (I)

CS (I) Department of Veterinary and Biomedical Sciences, University of Nebraska, 211 VBS, Fair St. and East Campus Loop, Lincoln, NE, 68583-0905: rbarletta@unl.edu USA

SO Antimicrobial Agents and Chemotherapy, (January, 2002) Vol. 46, No. 1, pp. 47-54. <http://aac.asm.org/>. print.  
ISSN: 0066-4804.

DT Article

LA English

AB \*\*\*Mycobacterium\*\*\* smegmatis is a fast-growing nonpathogenic species particularly useful in studying basic cellular processes of relevance to pathogenic \*\*\*mycobacteria\*\*\* . This study focused on the D-alanine racemase gene (*alrA*), which is involved in the synthesis of D-alanine, a basic component of peptidoglycan that forms the backbone of the cell wall. *M. smegmatis* *alrA* null mutants were generated by homologous recombination using a kanamycin resistance marker for insertional inactivation. Mutants were selected on Middlebrook medium supplemented with 50 mM D-alanine and 20 μg of kanamycin per ml. These mutants were also able to grow in standard and minimal media without D-alanine, giving rise to colonies with a drier appearance and more-raised borders than the wild-type strain. The viability of the mutants and independence of D-alanine for growth indicate that inactivation of *alrA* does not impose an auxotrophic requirement for D-alanine, suggesting the existence of a new pathway of D-alanine biosynthesis in *M. smegmatis*. Biochemical analysis demonstrated the absence of any detectable D-alanine racemase activity in the mutant strains. In addition, the *alrA* mutants displayed hypersusceptibility to the antimycobacterial agent D-cycloserine. The MIC of D-cycloserine for the mutant strain was 2.56 μg/ml, 30-fold less than that for the wild-type strain. Furthermore, this hypersusceptibility was confirmed by the bactericidal action of D-cycloserine on broth cultures. The kinetic of killing for the mutant strain followed the same pattern as that for the wild-type strain, but at a 30-fold-lower drug concentration. This effect does not involve a change in the permeability of the cell wall by this drug and is consistent with the identification of D-alanine racemase as a target of D-cycloserine. This outcome is of importance for the design of novel antituberculosis drugs targeting peptidoglycan biosynthesis in \*\*\*mycobacteria\*\*\* .

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2001:526210 CAPLUS

DN 135:117904

TI Identification of virulence determinants

IN Barletta, Raul G.; \*\*\*Harris, N. Beth\*\*\*

PA The Board of Regents of the University of Nebraska, USA

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2001051649 A2 20010719 WO 2001-US980 20010111

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
PRAI US 2000-175433P P 20000111

AB Disclosed are methods for the detn. of virulence determinants in bacteria and in particular bacteria of the genus \*\*\*Mycobacterium\*\*\* . Also disclosed are compns. and methods for stimulating an immune response in an animal using bacteria and virulence determinants identified by the methods of the present invention.

L4 ANSWER 4 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

3

AN 2001:475402 BIOSIS

DN PREV200100475402

TI \*\*\*Mycobacterium\*\*\* avium subsp. paratuberculosis in veterinary medicine.

AU \*\*\*Harris, N. Beth\*\*\* ; Barletta, Raul G. (1)

CS (1) Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, Rm 211, VBS Bldg., Lincoln, NE, 68583-0905:  
[rbarletta@unl.edu](mailto:rbarletta@unl.edu) USA

SO Clinical Microbiology Reviews, (July, 2001) Vol. 14, No. 3, pp. 489-512.  
print.

ISSN: 0893-8512.

DT General Review

LA English

SL English

L4 ANSWER 5 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

4

AN 2001:492494 BIOSIS

DN PREV200100492494

TI Identification of a secreted superoxide dismutase in \*\*\*Mycobacterium\*\*\* avium ssp. paratuberculosis.

AU Liu, Xiaofei; Feng, Zhengyu; \*\*\*Harris, N. Beth\*\*\* ; Cirillo, Jeffrey D.; Bercovier, Herve; Barletta, Raul G. (1)

CS (1) Department of Veterinary and Biomedical Sciences, University of Nebraska, 211 VBS, Fair and East Campus Loop, Lincoln, NE, 68583-0905:  
[rbarletta@unl.edu](mailto:rbarletta@unl.edu) USA

SO FEMS Microbiology Letters, (21 August, 2001) Vol. 202, No. 2, pp. 233-238.  
print.

ISSN: 0378-1097.

DT Article

LA English

SL English

AB \*\*\*Mycobacterium\*\*\* avium ssp. paratuberculosis (*M. paratuberculosis*), the causative agent of Johne's disease, is an important animal pathogen that has also been implicated in human disease. The major proteins expressed by *M. paratuberculosis* were analyzed by two-dimensional gel electrophoresis, and a superoxide dismutase (Sod) was identified from this protein profile. The *M. paratuberculosis* Sod has a molecular mass of 23 kDa and an isoelectric point of 6.1. Sequence analysis of the corresponding sodA gene from *M. paratuberculosis* indicates that this protein is a manganese-dependent enzyme. We show that the *M. paratuberculosis* Sod is actively secreted, suggesting that it may elicit a protective cellular immune response in the host during infection.

L4 ANSWER 6 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1999:342089 BIOSIS

DN PREV199900342089

TI Transposon mutagenesis of \*\*\*Mycobacterium\*\*\* paratuberculosis.

AU \*\*\*Harris, N. B. (1)\*\*\* ; Liu, X. (1); Cirillo, J. D. (1); Barletta, R. G. (1)

CS (1) University of Nebraska, Lincoln, NB USA  
SO Abstracts of the General Meeting of the American Society for Microbiology,  
(1999) Vol. 99, pp. 650.  
Meeting Info.: 99th General Meeting of the American Society for  
Microbiology Chicago, Illinois, USA May 30-June 3, 1999 American Society  
for Microbiology  
. ISSN: 1060-2011.  
DT Conference  
LA English

L4 ANSWER 7 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
5

AN 1999:104436 BIOSIS  
DN PREV199900104436  
TI Development of a firefly luciferase-based assay for determining  
antimicrobial susceptibility of \*\*\*Mycobacterium\*\*\* avium subsp.  
paratuberculosis.  
AU Williams, Stephanie L.; \*\*\*Harris, N. Beth (1)\*\*\* ; Barletta, Raul G.  
CS (1) Dep. Vet. Biomed. Sci., Univ. Nebraska-Lincoln, Lincoln, NE 68583-0905  
USA  
SO Journal of Clinical Microbiology, (Feb., 1999) Vol. 37, No. 2, pp.  
304-309.  
ISSN: 0095-1137.

DT Article  
LA English  
AB Paratuberculosis (Johne's disease) is a fatal disease of ruminants for  
which no effective treatment is available. Presently, no drugs against  
\*\*\*Mycobacterium\*\*\* avium subsp. paratuberculosis (*M. paratuberculosis*),  
the causative agent of Johne's disease, are approved for use in livestock.  
Additionally, *M. paratuberculosis* has been linked to a human chronic  
granulomatous ileitis (Crohn's disease). To assist in the evaluation of  
antimicrobial agents with potential activity against *M. paratuberculosis*,  
we have developed a firefly luciferase-based assay for the determination  
of drug susceptibilities. The microorganism used was *M. paratuberculosis*  
K-10(pYUB180), a clinical isolate carrying a plasmid with the firefly  
luciferase gene. The MICs determined by the broth macrodilution method  
were as follows: amikacin, 2 mug/ml; Bay y 3118, 0.015 mug/ml;  
clarithromycin, 1.25 mug/ml; D-cycloserine, 25 mug/ml; ethambutol, 20  
mug/ml; and rifabutin, 0.5 mug/ml. The strain was resistant to isoniazid  
and kanamycin. The results obtained by the luciferase assay were identical  
or fell within 1 doubling dilution. These results suggest that a  
combination of amikacin, clarithromycin, and rifabutin may be the most  
efficacious therapy for the treatment of *M. paratuberculosis* infections  
and that the use of fluoroquinolone class of antibiotics deserves further  
consideration. We demonstrate that the luciferase drug susceptibility  
assay is reliable for *M. paratuberculosis* and gives results within 7 days,  
whereas the broth macrodilution method requires 14 days.

L4 ANSWER 8 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
6

AN 1999:309795 BIOSIS  
DN PREV199900309795  
TI Development of a transposon mutagenesis system for \*\*\*Mycobacterium\*\*\*  
avium subsp. paratuberculosis.  
AU \*\*\*Harris, N. Beth\*\*\* ; Feng, Zhengyu; Liu, Xiaofei; Cirillo, Suat L.  
G.; Cirillo, Jeffrey D.; Barletta, Raul G. (1)  
CS (1) Department of Veterinary and Biomedical Sciences, University of  
Nebraska-Lincoln, Lincoln, NB, 68583-0905 USA  
SO FEMS Microbiology Letters, (June 1, 1999) Vol. 175, No. 1, pp. 21-26.  
ISSN: 0378-1097.  
DT Article

LA English

SL English

AB \*\*\*Mycobacterium\*\*\* avium subspecies paratuberculosis, a slow-growing \*\*\*Mycobacterium\*\*\*, is the causative agent of Johne's disease. Although M. paratuberculosis is difficult to manipulate genetically, our laboratory has recently demonstrated the ability to introduce DNA into these bacteria by transformation and phage infection. In the current study we develop the first transposon mutagenesis system for M. paratuberculosis using the conditionally replicating \*\*\*mycobacteriophage\*\*\* phAE94 to introduce the \*\*\*mycobacterial\*\*\* transposon Tn5367. Southern blotting and sequence analysis demonstrated that the transposon insertion sites are distributed relatively randomly throughout the M. paratuberculosis genome. We constructed a comprehensive bank of 5620 insertion mutants using this transposon. The transposition frequency obtained using this delivery system was 1.0 X 10<sup>-6</sup> transposition events per recipient cell. Auxotrophic mutants were observed in this library at a frequency of 0.3%.

L4 ANSWER 9 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

7

AN 1997:414391 BIOSIS

DN PREV199799706434

TI Overexpression of the D-alanine racemase gene confers resistance to D-cycloserine in \*\*\*Mycobacterium\*\*\* smegmatis.

AU Caceres, Nancy E.; \*\*\*Harris, N. Beth\*\*\* ; Wellehan, James F.; Feng, Zhengyu; Kapur, Vivek; Barletta, Raul G. (1)

CS (1) Dep. Veterinary Biomedical Sci., 211 VBS, Fair St. and East Campus Loop, Univ. Nebraska, Lincoln, NE 68583-0905 USA

SO Journal of Bacteriology, (1997) Vol. 179, No. 16, pp. 5046-5055.

ISSN: 0021-9193.

DT Article

LA English

AB D-Cycloserine is an effective second-line drug against \*\*\*Mycobacterium\*\*\* avium and \*\*\*Mycobacterium\*\*\* tuberculosis. To analyze the genetic determinants of D-cycloserine resistance in \*\*\*mycobacteria\*\*\*, a library of a resistant \*\*\*Mycobacterium\*\*\* smegmatis mutant was constructed. A resistant clone harboring a recombinant plasmid with a 3.1-kb insert that contained the glutamate decarboxylase (gadA) and D-alanine racemase (alrA) genes was identified. Subcloning experiments demonstrated that alrA was necessary and sufficient to confer a D-cycloserine resistance phenotype. The D-alanine racemase activities of wild-type and recombinant M. smegmatis strains were inhibited by D-cycloserine in a concentration-dependent manner. The D-cycloserine resistance phenotype in the recombinant clone was due to the overexpression of the wild-type alrA gene in a multicopy vector. Analysis of a spontaneous resistant mutant also demonstrated overproduction of wild-type AlrA enzyme. Nucleotide sequence analysis of the overproducing mutant revealed a single transversion (G fwdarw T) at the alrA promoter, which resulted in elevated beta-galactosidase reporter gene expression. Furthermore, transformants of \*\*\*Mycobacterium\*\*\* intracellulare and \*\*\*Mycobacterium\*\*\* bovis BCG carrying the M. smegmatis wild-type alrA gene in a multicopy vector were resistant to D-cycloserine, suggesting that AlrA overproduction is a potential mechanism of D-cycloserine resistance in clinical isolates of M. tuberculosis and other pathogenic \*\*\*mycobacteria\*\*\*. In conclusion, these results show that one of the mechanisms of D-cycloserine resistance in M. smegmatis involves the overexpression of the alrA gene due to a promoter-up mutation.

L4 ANSWER 10 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 1997:284722 BIOSIS

DN PREV199799583925

TI Overexpression of the D-alanine racemase gene confers D-cycloserine

resistance in \*\*\*mycobacteria\*\*\* .  
AU Caceres, N. E. (1); \*\*\*Harris, N. B.\*\*\* ; Wellehan, J. F.; Kapur, V.; Barletta, R. G.  
CS (1) Dep. Vet. Biomed. Sci. UNL, Lincoln, NE USA  
SO Abstracts of the General Meeting of the American Society for Microbiology, (1997) Vol. 97, No. 0, pp. 546.  
Meeting Info.: 97th General Meeting of the American Society for Microbiology Miami Beach, Florida, USA May 4-8, 1997  
ISSN: 1060-2011.  
DT Conference; Abstract; Conference  
LA English

=> s paratuberculosis and vaccin? and muta?  
LS 94 PARATUBERCULOSIS AND VACCIN? AND MUTA?

=> dup rem l5  
PROCESSING COMPLETED FOR L5  
L6 94 DUP REM L5 (0 DUPLICATES REMOVED)

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YOU HAVE REQUESTED DATA FROM 94 ANSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 94 USPATFULL  
AN 2002:72627 USPATFULL  
TI Nucleic, acids, proteins, and antibodies  
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES  
Ruben, Steven M., Olney, MD, UNITED STATES  
PI US 2002039764 A1 20020404  
AI US 2001-925298 A1 20010810 (9)  
RLI Continuation-in-part of Ser. No. WO 2000-US5881, filed on 8 Mar 2000,  
UNKNOWN  
PRAI US 1999-124270P 19990312 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 20087

AB The present invention relates to novel ovarian cancer and/or breast cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "ovarian and/or breast antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such ovarian and/or breast polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the reproductive system, particularly disorders of the ovaries and/or breast, including, but not limited to, the presence of ovarian and/or breast cancer and ovarian and/or breast cancer metastases. More specifically, isolated ovarian and/or breast nucleic acid molecules are provided encoding novel ovarian and/or breast polypeptides. Novel ovarian and/or breast polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian and/or breast polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the ovaries and/or breast, including ovarian and/or breast cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists

and antagonists of polynucleotides and polypeptides of the invention.  
The invention further relates to methods and/or compositions for  
inhibiting or promoting the production and/or function of the  
polypeptides of the invention.

- L6 ANSWER 2 OF 94 USPATFULL  
AN 2002:66896 USPATFULL  
TI ABC transport polynucleotides, polypeptides, and antibodies  
IN Ruben, Steven M., Olney, MD, UNITED STATES  
Ni, Jian, Germantown, MD, UNITED STATES  
Moore, Paul A., Germantown, MD, UNITED STATES  
PI US 2002037549 A1 20020328  
AI US 2001-767870 A1 20010124 (9)  
RLI Continuation-in-part of Ser. No. WO 2000-US19736, filed on 20 Jul 2000,  
UNKNOWN  
PRAI US 1999-145215P 19990723 (60)  
US 1999-149445P 19990818 (60)  
US 1999-164730P 19991112 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 12219  
AB The present invention relates to novel human ABC transport polypeptides  
and isolated nucleic acids containing the coding regions of the genes  
encoding such polypeptides. Also provided are vectors, host cells,  
antibodies, and recombinant methods for producing human ABC transport  
polypeptides. The invention further relates to diagnostic and  
therapeutic methods useful for diagnosing and treating disorders related  
to these novel human ABC transport polypeptides.
- L6 ANSWER 3 OF 94 USPATFULL  
AN 2002:66870 USPATFULL  
TI IL-6-like polynucleotides, polypeptides, and antibodies  
IN Ruben, Steven M., Olney, MD, UNITED STATES  
Shi, Yanggu, Gaithersburg, MD, UNITED STATES  
PI US 2002037523 A1 20020328  
AI US 2001-875016 A1 20010607 (9)  
RLI Continuation-in-part of Ser. No. WO 2000-US33134, filed on 7 Dec 2000,  
UNKNOWN  
PRAI US 1999-169838P 19991209 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 11587  
AB The present invention relates to novel human IL-6-like polypeptides and  
isolated nucleic acids containing the coding regions of the genes  
encoding such polypeptides. Also provided are vectors, host cells,  
antibodies, and recombinant methods for producing human IL-6-like  
polypeptides. The invention further relates to diagnostic and  
therapeutic methods useful for diagnosing and treating disorders related  
to these novel human IL-6-like polypeptides.

- L6 ANSWER 4 OF 94 USPATFULL  
AN 2002:48258 USPATFULL  
TI 26 Human secreted proteins

IN Ruben, Steven M., Olney, MD, UNITED STATES  
Birse, Charles E., North Potomac, MD, UNITED STATES  
Duan, Roxanne D., Bethesda, MD, UNITED STATES  
Soppet, Daniel R., Centreville, VA, UNITED STATES  
Rosen, Craig A., Laytonsville, MD, UNITED STATES  
Shi, Yanggu, Gaithersburg, MD, UNITED STATES  
LaFleur, David W., Washington, DC, UNITED STATES  
Olsen, Henrik, Gaithersburg, MD, UNITED STATES  
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES  
Florence, Kimberly A., Rockville, MD, UNITED STATES  
Ni, Jian, Rockville, MD, UNITED STATES  
Young, Paul, Gaithersburg, MD, UNITED STATES  
PI US 2002028449 A1 20020307  
AI US 2000-726643 A1 20001201 (9)  
RLI Continuation-in-part of Ser. No. WO 2000-US15187, filed on 2 Jun 2000,  
UNKNOWN  
PRAI US 1999-137725P 19990607 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 20287  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L6 ANSWER 5 OF 94 USPATFULL  
AN 2002:48024 USPATFULL  
TI NOVEL \*\*\*VACCINES\*\*\* AND PHARMACEUTICAL COMPOSITIONS USING MEMBRANE VESICLES OF MICROORGANISMS, AND METHODS FOR PREPARING SAME  
IN KADURUGAMUWA, JAGATH L., GUELPH, CANADA  
BEVERIDGE, TERRY J., ELORA, CANADA  
PI US 2002028215 A1 20020307  
AI US 1999-370860 A1 19990809 (9)  
DT Utility  
FS APPLICATION  
LREP DOUGLAS P MUELLER, MERCHANT & GOULD PC, 3100 NORWEST CENTER, 90 SOUTH SEVENTH STREET, MINNEAPOLIS, MN, 55402  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN 35 Drawing Page(s)  
LN.CNT 2647  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention relates to novel \*\*\*vaccines\*\*\* and pharmaceutical compositions using membrane vesicles of microorganisms, methods for preparing same, and their use in the prevention and treatment of infectious diseases.

L6 ANSWER 6 OF 94 USPATFULL  
AN 2002:43671 USPATFULL  
TI 49 human secreted proteins  
IN Moore, Paul A., Germantown, MD, UNITED STATES  
Ruben, Steven M., Olney, MD, UNITED STATES  
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES  
Rosen, Craig A., Laytonsville, MD, UNITED STATES  
Florence, Kimberly A., Rockville, MD, UNITED STATES  
Soppet, Daniel R., Centreville, VA, UNITED STATES  
LaFleur, David W., Washington, DC, UNITED STATES  
Endress, Gregory A., Potomac, MD, UNITED STATES  
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES  
Komatsoulis, George, Silver Spring, MD, UNITED STATES  
Duan, Roxanne D., Bethesda, MD, UNITED STATES

PI US 2002026040 AI 20020228  
AI US 2001-904615 AI 20010716 (9)

RLI Continuation of Ser. No. US 2000-739254, filed on 19 Dec 2000, PENDING  
Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED  
Continuation-in-part of Ser. No. WO 1999-US19330, filed on 24 Aug 1999,  
UNKNOWN

PRAI US 1998-97917P 19980825 (60)  
US 1998-98634P 19980831 (60)

DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 19401

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L6 ANSWER 7 OF 94 USPATFULL  
AN 2002:43668 USPATFULL  
TI VASCULAR ENDOTHELIAL GROWTH FACTOR 3 ANTIBODIES  
IN HU, JING-SHAN, SUNNYVALE, CA, UNITED STATES  
OLSEN, HENRIK, GAITHERSBURG, MD, UNITED STATES  
ROSEN, CRAIG A., LAYTONSVILLE, MD, UNITED STATES

PI US 2002026037 AI 20020228  
AI US 1999-244694 AI 19990210 (9)

RLI Continuation-in-part of Ser. No. US 1998-132088, filed on 10 Aug 1998,  
ABANDONED Continuation-in-part of Ser. No. US 1998-33662, filed on 3 Mar  
1998, PENDING Division of Ser. No. US 1995-469641, filed on 6 Jun 1995,  
PENDING

DT Utility  
FS APPLICATION  
LREP STERNE KESSLER GOLDSTEIN & FOX, 1100 NEW YORK AVENUE N W, SUITE 600,  
WASHINGTON, DC, 200053934  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 6301

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel human protein called Vascular Endothelial Growth Factor 3, and isolated polynucleotides encoding this protein. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to this novel human protein.

L6 ANSWER 8 OF 94 USPATFULL  
AN 2002:43187 USPATFULL  
TI Transforming growth factor alpha HIII  
IN Wei, Ying-Fei, Berkeley, CA, UNITED STATES  
PI US 2002025553 A1 20020228  
AI' US 2000-726348 A1 20001201 (9)  
RLI Continuation-in-part of Ser. No. US 1997-778545, filed on 3 Jan 1997,  
PENDING  
PRAI US 1996-11136P 19960104 (60)  
US 1999-168387P 19991202 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 11810  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to a novel human protein called Transforming Growth Factor Alpha III, and isolated polynucleotides encoding this protein. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to this novel human protein.

L6 ANSWER 9 OF 94 USPATFULL  
AN 2002:22131 USPATFULL  
TI 18 Human secreted proteins  
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES  
Young, Paul E., Gaithersburg, MD, UNITED STATES  
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES  
Soppet, Daniel R., Centreville, VA, UNITED STATES  
Ruben, Steven M., Olney, MD, UNITED STATES  
PI US 2002012966 A1 20020131  
AI US 2001-768826 A1 20010125 (9)  
RLI Continuation-in-part of Ser. No. WO 2000-US22350, filed on 15 Aug 2000,  
UNKNOWN  
PRAI US 1999-148759P 19990816 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 18157  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L6 ANSWER 10 OF 94 USPATFULL  
AN 2002:12261 USPATFULL  
TI Uteroglobin-like polynucleotides, polypeptides, and antibodies  
IN Ni, Jian, Germantown, MD, UNITED STATES  
Ruben, Steven M., Olney, MD, UNITED STATES  
PI US 2002006640 A1 20020117

AI US 2001-846258 A1 20010502 (9)  
RLI Continuation-in-part of Ser. No. WO 2000-US30326, filed on 3 Nov 2000,  
UNKNOWN  
PRAI US 1999-163395P 19991104 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 12076  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to novel human uteroglobin-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human uteroglobin-like polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human uteroglobin-like polypeptides.

L6 ANSWER 11 OF 94 USPATFULL  
AN 2002:8489 USPATFULL  
TI Retinoid receptor interacting polynucleotides, polypeptides, and antibodies  
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES  
Ruben, Steven M., Olney, MD, UNITED STATES  
PI US 2002004489 A1 20020110  
AI US 2001-788600 A1 20010221 (9)  
RLI Continuation-in-part of Ser. No. WO 2000-US22351, filed on 15 Aug 2000,  
UNKNOWN  
PRAI US 1999-148757P 19990816 (60)  
US 2000-189026P 20000314 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 11257  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to novel human RIP polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human RIP polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human RIP polypeptides.

L6 ANSWER 12 OF 94 USPATFULL  
AN 2002:75204 USPATFULL  
TI Detection of nucleic acids by target-catalyzed formation  
IN Western, Linda M., San Mateo, CA, United States  
Rose, Samuel J., Los Altos, CA, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Dade Behring Inc., Deerfield, IL, United States (U.S. corporation)  
PI US 6368803 B1 20020409  
AI US 2000-608721 20000630 (9)  
RLI Continuation of Ser. No. US 1999-440363, filed on 15 Nov 1999, now patented, Pat. No. US 6121001 Continuation of Ser. No. US 1998-15949, filed on 30 Jan 1998, now patented, Pat. No. US 6110677 Continuation of Ser. No. US 1996-961627, filed on 2 Aug 1996, now patented, Pat. No. US

5792614 Continuation of Ser. No. US 1994-363169, filed on 23 Dec 1994,  
now abandoned

DT Utility

FS GRANTED

EXNAM Primary Examiner: Riley, Jezia

LREP Gattari, Patrick G, McDonnell Boehnen Hulbert & Berghoff

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 1371

AB A method is disclosed for modifying an oligonucleotide, which method has application to the detection of a polynucleotide analyte. An oligonucleotide is reversibly hybridized with a polynucleotide, for example, a polynucleotide analyte, in the presence of a 5'-nuclease under isothermal conditions. The polynucleotide analyte serves as a recognition element to enable a 5'-nuclease to cleave the oligonucleotide to provide (i) a first fragment that is substantially non-hybridizable to the polynucleotide analyte and (ii) a second fragment that lies 3' of the first fragment (in the intact oligonucleotide) and is substantially hybridizable to the polynucleotide analyte. At least a 100-fold molar excess of the first fragment and/or the second fragment are obtained relative to the molar amount of the polynucleotide analyte. The presence of the first fragment and/or the second fragment is detected, the presence thereof indicating the presence of the polynucleotide analyte. The method has particular application to the detection of a polynucleotide analyte such as DNA. Kits for conducting methods in accordance with the present invention are also disclosed.

L6 ANSWER 13 OF 94 USPATFULL

AN 2002:75189 USPATFULL

TI Method of treating complications in immunodepressed states resulting from HIV infection

IN Kozhemyakin, Andrei L., St. Petersburg, RUSSIAN FEDERATION  
Sinackevich, Nickolai V., St. Petersburg, RUSSIAN FEDERATION  
Seryi, Sergey V., St. Petersburg, RUSSIAN FEDERATION  
Rakhilov, Alexei M., St. Petersburg, RUSSIAN FEDERATION  
Morozov, Vyacheslav G., St. Petersburg, RUSSIAN FEDERATION  
Khavinson, Vladimir Kh., St. Petersburg, RUSSIAN FEDERATION

PA Cytran, Inc., Kirkland, WA, United States (U.S. corporation)

PI US 6368788 B1 20020409

AI US 1997-977279 19971124 (8)

RLI Continuation of Ser. No. US 1995-452411, filed on 26 May 1995, now patented, Pat. No. US 5728680 Continuation-in-part of Ser. No. US 1994-278463, filed on 21 Jul 1994, now abandoned Continuation-in-part of Ser. No. US 1994-257495, filed on 7 Jun 1994, now abandoned Continuation of Ser. No. US 1991-783518, filed on 28 Oct 1991, now abandoned Continuation-in-part of Ser. No. US 1991-678129, filed on 1 Apr 1991, now abandoned

PRAI SU 1987-4352833 19871230

DT Utility

FS GRANTED

EXNAM Primary Examiner: Park, Hankyel

LREP Townsend and Townsend and Crew LLP

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 8 Drawing Page(s)

LN.CNT 7640

AB Methods of treatment of subjects for decreasing cell mediated autoimmunity or humoral autoimmunity by administering an R'-Glu-Trp-R" pharmaceutical preparation useful in subjects having autoimmune

diseases.

L6 ANSWER 14 OF 94 USPATFULL

AN 2002:69791 USPATFULL

TI Prostate specific secreted protein

IN Endress, Gregory A., Potomac, MD, United States

Rosen, Craig A., Laytonsville, MD, United States

PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

PI US 6365369 B1 20020402

AI US 1999-280839 19990330 (9)

PRAI US 1998-80898P 19980407 (60)

US 1998-80311P 19980401 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Caputa, Anthony C.; Assistant Examiner: Harris, Alana M.

LREP Human Genome Sciences, Inc.

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 5138

AB The present invention relates to a novel human protein called Prostate Specific Secreted Protein, and isolated polynucleotides encoding this protein. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to this novel human protein.

L6 ANSWER 15 OF 94 USPATFULL

AN 2002:69768 USPATFULL

TI Quantitative determination of nucleic acid amplification products

IN Patel, Rajesh, Fremont, CA, United States

Kurn, Nurith, San Jose, CA, United States

PA Dade Behring Inc., Deerfield, IL, United States (U.S. corporation)

PI US 6365346 B1 20020402

AI US 1998-25639 19980218 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Fredman, Jeffrey; Assistant Examiner: Chakrabarti, Aroun Kr.

LREP Gattari, Patrick G, McDonnell Boehnen Hulbert & Berghoff

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 2537

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method for detecting the amount of a target polynucleotide in a sample. A combination is provided in a medium. The combination comprises (i) a sample suspected of containing the target polynucleotide, the target polynucleotide being in single stranded form, (ii) a reference polynucleotide comprising a sequence that is common with a sequence of the target polynucleotide, and (iii) a predetermined amount of an oligonucleotide probe that has a sequence that hybridizes with the sequence that is common. The combination is subjected to conditions for amplifying the target polynucleotide and the reference polynucleotide. The conditions permit formation of substantially non-dissociative complexes of the target polynucleotide and the reference polynucleotide, respectively, with the oligonucleotide probe. Furthermore, the predetermined amount of the oligonucleotide probe is less than the expected amount of the amplified target

polynucleotide. The ratio of the amount of the complex of the target polynucleotide with the oligonucleotide probe to the amount of the complex of the reference polynucleotide with the oligonucleotide probe is determined. Determination of the ratio is facilitated by employing second and third oligonucleotide probes. The second oligonucleotide probe has a sequence that hybridizes only with the second sequence of the target polynucleotide. The third oligonucleotide probe has a sequence that hybridizes only with a respective second sequence of the reference polynucleotide. The ratio is related to the known amount of the reference polynucleotide to determine the amount of the target polynucleotide in the sample. One or more reference polynucleotides may be employed with a corresponding third oligonucleotide probe for each reference probe. Kits for carrying out the above methods are also disclosed. The method is particularly applicable to the amplification and detection of RNA.

L6 ANSWER 16 OF 94 USPATFULL

AN 2002:39663 USPATFULL

TI Compositions and methods for the prevention and treatment of M. tuberculosis infection

IN Reed, Steven G., Bellevue, WA, United States  
Skeiky, Yasir A. W., Seattle, WA, United States  
Dillon, Davin C., Redmond, WA, United States

PA Corixa Corporation, Seattle, WA, United States (U.S. corporation)

PI US 6350456 B1 20020226

AI US 1998-56556 19980407 (9)

RLI Continuation-in-part of Ser. No. US 1998-25197, filed on 18 Feb 1998, now abandoned Continuation-in-part of Ser. No. US 1997-942578, filed on 1 Oct 1997, now abandoned Continuation-in-part of Ser. No. US 1997-818112, filed on 13 Mar 1997

DT Utility

FS GRANTED

EXNAM Primary Examiner: Swartz, Rodney P

LREP Townsend and Townsend and Crew LLP

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 23 Drawing Figure(s); 14 Drawing Page(s)

LN.CNT 6417

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for treatment and \*\*\*vaccination\*\*\* against tuberculosis are disclosed. In one aspect the compositions provided include at least two polypeptides that contain an immunogenic portion of a M. tuberculosis antigen or at least two DNA molecules encoding such polypeptides. In a second aspect, the compositions provided include a fusion protein comprising at least two polypeptides that contain an immunogenic portion of a M. tuberculosis antigen. Such compositions may be formulated into \*\*\*vaccines\*\*\* and/or pharmaceutical compositions for immunization against M. tuberculosis infection, or may be used for the diagnosis of tuberculosis.

L6 ANSWER 17 OF 94 USPATFULL

AN 2002:19393 USPATFULL

TI Secreted protein HLHFP03

IN Rosen, Craig A., Laytonsville, MD, United States  
Ruben, Steven M., Olney, MD, United States  
Olsen, Henrik S., Gaithersburg, MD, United States  
Ebner, Reinhard, Gaithersburg, MD, United States

PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

PI US 6342581 B1 20020129

AI US 1999-227357 19990108 (9)

RLI Continuation-in-part of Ser. No. WO 1998-US13684, filed on 7 Jul 1998

PRAI US 1997-58785P 19970912 (60)

US 1997-58664P 19970912 (60)  
US 1997-58660P 19970912 (60)  
US 1997-58661P 19970912 (60)  
US 1997-55722P 19970818 (60)  
US 1997-55723P 19970818 (60)  
US 1997-55948P 19970818 (60)  
US 1997-55949P 19970818 (60)  
US 1997-55953P 19970818 (60)  
US 1997-55950P 19970818 (60)  
US 1997-55947P 19970818 (60)  
US 1997-55964P 19970818 (60)  
US 1997-56360P 19970818 (60)  
US 1997-55684P 19970818 (60)  
US 1997-55984P 19970818 (60)  
US 1997-55954P 19970818 (60)  
US 1997-51926P 19970708 (60)  
US 1997-52793P 19970708 (60)  
US 1997-51925P 19970708 (60)  
US 1997-51929P 19970708 (60)  
US 1997-52803P 19970708 (60)  
US 1997-52732P 19970708 (60)  
US 1997-51931P 19970708 (60)  
US 1997-51932P 19970708 (60)  
US 1997-51916P 19970708 (60)  
US 1997-51930P 19970708 (60)  
US 1997-51918P 19970708 (60)  
US 1997-51920P 19970708 (60)  
US 1997-52733P 19970708 (60)  
US 1997-52795P 19970708 (60)  
US 1997-51919P 19970708 (60)  
US 1997-51928P 19970708 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Myers, Carla J.; Assistant Examiner: Spiegler,  
Alexander H.

LREP Human Genome Sciences, Inc.

CLMN Number of Claims: 46

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 18742

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins.

L6 ANSWER 18 OF 94 USPATFULL

AN 2002:9651 USPATFULL

TI Compounds and methods for diagnosis of tuberculosis

IN Reed, Steven G., Bellevue, WA, United States

Skeiky, Yasir A. W., Seattle, WA, United States

Dillon, Davin C., Redmond, WA, United States

Campos-Neto, Antonio, Bainbridge Island, WA, United States

Houghton, Raymond, Bothell, WA, United States

Vedvick, Thomas S., Federal Way, WA, United States

Twardzik, Daniel R., Bainbridge Island, WA, United States

PA Corixa Corporation, Seattle, WA, United States (U.S. corporation)  
PI US 6338852 B1 20020115  
AI US 1997-818111 19970313 (8)  
RLI Continuation-in-part of Ser. No. US 729622 Continuation-in-part of Ser.  
No. US 1996-680574, filed on 12 Jul 1996 Continuation-in-part of Ser.  
No. US 1996-658800, filed on 5 Jun 1996 Continuation-in-part of Ser. No.  
US 1996-620280, filed on 22 Mar 1996, now abandoned Continuation-in-part  
of Ser. No. US 1995-532136, filed on 22 Sep 1995, now abandoned  
Continuation of Ser. No. US 1995-523435, filed on 1 Sep 1995, now  
abandoned

DT Utility  
FS GRANTED

EXNAM Primary Examiner: Swartz, Rodney P.  
LREP Townsend and Townsend and Crew LLP  
CLMN Number of Claims: 93  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 13 Drawing Page(s)

LN.CNT 2650

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds and methods for diagnosing tuberculosis are disclosed. The compounds provided include polypeptides that contain at least one antigenic portion of one or more M. tuberculosis proteins, and DNA sequences encoding such polypeptides. Diagnostic kits containing such polypeptides or DNA sequences and a suitable detection reagent may be used for the detection of M. tuberculosis infection in patients and biological samples. Antibodies directed against such polypeptides are also provided.

L6 ANSWER 19 OF 94 CAPLUS COPYRIGHT 2002 ACS

AN 2001:319756 CAPLUS

DN 134:352262

TI \*\*\*Vaccine\*\*\* compositions

IN Murphy, John R.; O'Lear, Edward; Harrison, Robert J.

PA Advanced Microbial Solutions Corp., USA

SO PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

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PI WO 2001030384 A1 20010503 WO 2000-US29231 20001023  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-161193P P 19991022

US 1999-161292P P 19991025

AB Disclosed are virulent or opportunistic prokaryotes in which metal ion-dependent gene regulation confers a growth or an infectious advantage. The prokaryote contains a DNA mol. contg. a sequence encoding a dominant, metal ion-independent repressor protein or a partially metal ion independent repressor protein. The prokaryotes are formulated into \*\*\*vaccine\*\*\* compns. and administered to a human or other animal to enhance protective immunity against infectious and diseases caused by prokaryotes in which metal ion-dependant gene regulation confers a growth

or an infectious advantage.  
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 94 CAPLUS COPYRIGHT 2002 ACS  
AN 2001:31632 CAPLUS  
DN 134:111206  
TI Method of making and identifying attenuated microorganisms, compositions utilizing the sequences responsible for attenuation, and preparations containing attenuated microorganisms  
IN Gicquel, Brigitte; Guilhot, Christophe; Camacho, Luis  
PA Institut Pasteur, Fr.  
SO PCT Int. Appl., 159 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001002555	A1	20010111	WO 2000-IB950	20000706
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI US 1999-142982P	P	19990706		
US 1999-142833P P 19990708				

AB A functional genomic approach for identification of \*\*\*mutants\*\*\* of microorganisms that are unable to grow under certain specific conditions is disclosed. In one aspect of the invention, a method is provided in which a library of signature tagged transposon \*\*\*mutants\*\*\* (STM) is constructed and screened for \*\*\*mutants\*\*\* attenuated in pathogenicity. The method is esp. useful for identifying loci involved in pathogenicity. The method is well suited to identification of \*\*\*mutant\*\*\* actinomycetales, such as mycobacteria. To perform an STM in *M. tuberculosis*, plasmid pCG113 was constructed, comprising a temp.-sensitive-sacB vector carrying an IS1096 deriv. with a unique restriction site permitting the insertion of DNA signature tags. This allows efficient counter-selection of the plasmid at 39.degree. on sucrose and isolation of large nos. of *M. tuberculosis* transposition \*\*\*mutants\*\*\*. The method is useful for, among other things, drug discovery and construction of \*\*\*vaccines\*\*\*.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 21 OF 94 USPATFULL  
AN 2001:160802 USPATFULL  
TI Interleukins-21 and 22  
IN Ebner, Reinhard, Gaithersburg, MD, United States  
Ruben, Steven M., Olney, MD, United States  
PI US 2001023070 A1 20010920  
AI US 2000-731816 A1 20001208 (9)  
RLI Continuation-in-part of Ser. No. US 1999-320713, filed on 27 May 1999,  
PENDING Continuation-in-part of Ser. No. WO 1999-US11644, filed on 27 May 1999, UNKNOWN  
PRAI US 1998-87340P 19980529 (60)  
US 1999-131965P 19990430 (60)

US 1999-169837P 19991209 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 49

ECL Exemplary Claim: 1

DRWN 13 Drawing Page(s)

LN.CNT 7740

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human proteins designated Interleukin-21 (IL-21) and Interleukin-22 (IL-22), and isolated polynucleotides encoding these proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing these human proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, and/or preventing disorders related to these novel human proteins.

L6 ANSWER 22 OF 94 USPATFULL

AN 2001:155766 USPATFULL

TI 49 human secreted proteins

IN Moore, Paul A., Germantown, MD, United States

Ruben, Steven M., Olney, MD, United States

Olsen, Henrik S., Gaithersburg, MD, United States

Shi, Yanggu, Gaithersburg, MD, United States

Rosen, Craig A., Laytonsville, MD, United States

Florence, Kimberly A., Rockville, MD, United States

Soppet, Daniel R., Centreville, VA, United States

Lafleur, David W., Washington, DC, United States

Endress, Gregory A., Potomac, MD, United States

Ebner, Reinhard, Gaithersburg, MD, United States

Komatsoulis, George, Silver Spring, MD, United States

Duan, Roxanne D., Bethesda, MD, United States

PI US 2001021700 A1 20010913

AI US 2000-739254 A1 20001219 (9)

RLI Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED

Continuation-in-part of Ser. No. WO 1999-US19330, filed on 24 Aug 1999,

UNKNOWN

PRAI US 1998-97917P 19980825 (60)

US 1998-98634P 19980831 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 15462

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L6 ANSWER 23 OF 94 USPATFULL

AN 2001:139604 USPATFULL

TI 29 human secreted proteins

IN Ruben, Steven M., Olney, MD, United States

Rosen, Craig A., Laytonsville, MD, United States

Fan, Ping, Gaithersburg, MD, United States

Kyaw, Hla, Frederick, MD, United States  
Wei, Ying-Fei, Berkeley, CA, United States

PI US 2001016647 A1 20010823  
AI US 2000-729835 A1 20001206 (9)

RLI Division of Ser. No. US 1999-257179, filed on 25 Feb 1999, PENDING  
Continuation-in-part of Ser. No. WO 1998-US17709, filed on 27 Aug 1998,  
UNKNOWN

PRAI US 1997-56270P 19970829 (60)  
US 1997-56271P 19970829 (60)  
US 1997-56247P 19970829 (60)  
US 1997-56073P 19970829 (60)

DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 6098

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins.

L6 ANSWER 24 OF 94 USPATFULL  
AN 2001:128901 USPATFULL  
TI 36 human secreted proteins  
IN LaFleur, David W., Washington, DC, United States  
Soppet, Daniel R., Centreville, VA, United States  
Olsen, Henrik, Gaithersburg, MD, United States  
Ruben, Steven M., Olney, MD, United States  
Ni, Jian, Rockville, MD, United States  
Rosen, Craig A., Laytonsville, MD, United States  
Brewer, Laurie A., St. Paul, MN, United States  
Duan, Roxanne, Bethesda, MD, United States  
Ebner, Reinhard, Gaithersburg, MD, United States

PI US 2001012889 A1 20010809  
AI US 2000-739907 A1 20001220 (9)

RLI Continuation of Ser. No. US 1999-348457, filed on 7 Jul 1999, ABANDONED  
Continuation-in-part of Ser. No. WO 1999-US108, filed on 6 Jan 1999,  
UNKNOWN

PRAI US 1998-70704P 19980107 (60)  
US 1998-70658P 19980107 (60)  
US 1998-70692P 19980107 (60)  
US 1998-70657P 19980107 (60)

DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 10341

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to 36 novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic

methods useful for diagnosing and treating disorders related to these novel human secreted proteins.

L6 ANSWER 25 OF 94 USPATFULL

AN 2001:123426 USPATFULL

TI PROSTATE DERIVED ETS FACTOR

IN LIBERMANN, TOWIA ARON, NEWTON, MA, United States

OETTGEN, JOERG PETER, BROOKLINE, MA, United States

KUNSCH, CHARLES A., NORCROSS, GA, United States

ENDRESS, GREGORY A., POTOMAC, MD, United States

ROSEN, CRAIG A., LAYTONSVILLE, MD, United States

PI US 2001010934 AI 20010802

AI US 1998-126945 AI 19980731 (9)

DT Utility

FS APPLICATION

LREP STERNE KESSLER GOLDSTEIN AND FOX, SUITE 600, 1100 NEW YORK AVENUE N W,  
WASHINGTON, DC, 200053934

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 10 Drawing Page(s)

LN.CNT 4218

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel human protein called Prostate Derived Ets Factor, and isolated polynucleotides encoding this protein. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to this novel human protein.

L6 ANSWER 26 OF 94 USPATFULL

AN 2001:235114 USPATFULL

TI Human glycosylation enzymes

IN Coleman, Timothy A., Gaithersburg, MD, United States

Betenbaugh, Michael J., Baltimore, MD, United States

PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)

PI US 6333182 B1 20011225

AI US 2000-516143 20000301 (9)

PRAI US 1999-122409P 19990302 (60)

US 1999-122582P 19990302 (60)

US 1999-169624P 19991208 (60)

US 1999-169624P 19991208 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Monshipouri, M.

LREP Human Genome Sciences, Inc.

CLMN Number of Claims: 120

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 4502

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human glycosylation enzyme polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human glycosylation enzyme polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human glycosylation enzyme

polypeptides.

L6 ANSWER 27 OF 94 USPATFULL

AN 2001:162993 USPATFULL

TI Self initiating single primer amplification of nucleic acids

IN Ullman, Edwin F., Atherton, CA, United States

Rose, Samuel J., Mountain View, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PI US 6294323 B1 20010925

AI US 1993-46682 19930414 (8)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Zitomer, Stephanie W.; Assistant Examiner: Tran, Paul B.

LREP Leitereg, Theodore J., Peries, Rohan

CLMN Number of Claims: 48

ECL Exemplary Claim: 1

DRWN 4 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 1720

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for producing at least one copy of a pair of complementary single stranded polynucleotides. The method comprises forming, in the presence of nucleoside triphosphates and template dependent polynucleotide polymerase along each of the complementary single stranded polynucleotides, an extension of a polynucleotide primer. The polynucleotide primer is comprised of at least a sequence of 16 nucleotides terminating at its 3' end in a 2 to 9 nucleotide sequence (S1), which is complementary with the 3' ends of both of the complementary single stranded polynucleotides. The polynucleotide primer has at least an 8 nucleotide sequence (S2) that is 5' of S1, where S2 is 50 to 80% complementary to the nucleotide sequences contiguous with the 3' ends of the complementary single stranded polynucleotides. The extended polynucleotide primer and the single stranded polynucleotides are then dissociated.

L6 ANSWER 28 OF 94 USPATFULL

AN 2001:157807 USPATFULL

TI Compounds and methods for immunotherapy and diagnosis of tuberculosis

IN Reed, Steven G., Bellevue, WA, United States

Skeiky, Yasir A. W., Seattle, WA, United States

Dillon, Davin C., Redmond, WA, United States

Campos-Neto, Antonio, Bainbridge Island, WA, United States

Houghton, Raymond, Bothell, WA, United States

Vedvick, Thomas S., Federal Way, WA, United States

Twardzik, Daniel R., Bainbridge Island, WA, United States

PA Corixa Corporation, Seattle, WA, United States (U.S. corporation)

PI US 6290969 B1 20010918

AI US 1997-818112 19970313 (8)

RLI Continuation-in-part of Ser. No. US 1996-730510, filed on 11 Oct 1996

Continuation-in-part of Ser. No. US 1996-680574, filed on 12 Jul 1996

Continuation-in-part of Ser. No. US 1996-659683, filed on 5 Jun 1996

Continuation-in-part of Ser. No. US 1996-620874, filed on 22 Mar 1996, now abandoned Continuation-in-part of Ser. No. US 1995-533634, filed on 22 Sep 1995, now abandoned Continuation-in-part of Ser. No. US 1995-523436, filed on 1 Sep 1995, now abandoned

DT Utility

FS GRANTED

EXNAM Primary Examiner: Swartz, Rodney P.

LREP Townsend & Townsend & Crew LLP

CLMN Number of Claims: 98

ECL Exemplary Claim: 1

DRWN 7 Drawing Figure(s); 9 Drawing Page(s)

LN.CNT 2142

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds and methods for inducing protective immunity against tuberculosis are disclosed. The compounds provided include polypeptides that contain at least one immunogenic portion of one or more M. tuberculosis proteins and DNA molecules encoding such polypeptides. Such compounds may be formulated into \*\*\*vaccines\*\*\* and/or pharmaceutical compositions for immunization against M. tuberculosis infection, or may be used for the diagnosis of tuberculosis.

L6 ANSWER 29 OF 94 USPATFULL

AN 2001:157804 USPATFULL

TI Dim \*\*\*mutants\*\*\* of mycobacteria and use thereof

IN Cox, Jeffery S., Larchmont, NY, United States

Jacobs, Jr., William R., City Island, NY, United States

PA Albert Einstein College of Medicine of Yeshiva University, Bronx, NY, United States (U.S. corporation)

PI US 6290966 B1 20010918

AI US 1999-350326 19990709 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Swart, Rodney P.

LREP Amster, Rothstein & Ebenstein

CLMN Number of Claims: 16

ECL Exemplary Claim: 1

DRWN 8 Drawing Figure(s); 6 Drawing Page(s)

LN.CNT 588

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are novel recombinant \*\*\*mutant\*\*\* strains of mycobacteria that are deficient for the synthesis or transport of dimycoserosalphthiocerol ("DIM"). The present invention also provides a method of producing a recombinant \*\*\*mutant\*\*\* mycobacterium that is deficient for the synthesis or transport of DIM, comprising \*\*\*mutating\*\*\* a nucleic acid responsible for the synthesis or transport of dimycoserosalphthiocerol, including a nucleic acid comprising the promoter for the pps operon, fadD28 or mmpL7. The present invention also provides a \*\*\*vaccine\*\*\* comprising a DIM \*\*\*mutant\*\*\* mycobacterium of the present invention, as well as a method for the treatment or prevention of tuberculosis in a subject using the \*\*\*vaccine\*\*\* .

L6 ANSWER 30 OF 94 USPATFULL

AN 2001:152482 USPATFULL

TI Method of identifying high immune response animals

IN Wagter-Lesperance, Lauraine, 120 Milcrest Way, S.W., Calgary, Alberta, Canada T2Y 2J6

Mallard, Bonnie, 12 Atchison Lane, Fergus, Ontario, Canada N1M 3K1

PI US 6287564 B1 20010911

AI US 1998-215328 19981218 (9)

PRAI US 1997-68750P 19971224 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Nolan, Patrick J.

LREP Bereskin & Parr, Gravelle, Micheline

CLMN Number of Claims: 5

ECL Exemplary Claim: 1

DRWN 15 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 4136

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a method and use of a method of identifying high immune response animals under stress. The animals are identified by a ranking procedure that classifies the animal's immune response to an antigen over a period of time that spans the stress.

L6 ANSWER 31 OF 94 USPATFULL

AN 2001:125562 USPATFULL

TI Recombinant mycobacterial \*\*\*vaccine\*\*\*

IN Bloom, Barry R., Hastings on Hudson, NY, United States

Davis, Ronald W., Palo Alto, CA, United States

Jacobs, Jr., William R., Bronx, NY, United States

Young, Richard A., Winchester, MA, United States

Husson, Robert N., Takoma Park, MD, United States

PA Albert Einstein College of Medicine of Yeshiva University, Bronx, NY, United States (U.S. corporation)

The Board of Trustees of the Leland Stanford, Jr. University, Palo Alto, CA, United States (U.S. corporation)

Whitehead Institute for Biomedical Research, Cambridge, MA, United States (U.S. corporation)

PI US 6270776 B1 20010807

AI US 1995-454075 19950530 (8)

RLI Division of Ser. No. US 1989-361944, filed on 5 Jun 1989, now patented, Pat. No. US 5504005 Continuation-in-part of Ser. No. US 1988-223089, filed on 22 Jul 1988, now abandoned Continuation-in-part of Ser. No. US 1988-216390, filed on 7 Jul 1988, now abandoned Continuation-in-part of Ser. No. US 1988-163546, filed on 3 Mar 1988, now abandoned Continuation-in-part of Ser. No. US 1987-20451, filed on 2 Mar 1987, now abandoned

DT Utility

FS GRANTED

EXNAM Primary Examiner: McGarry, Sean

LREP Hamilton, Brook, Smith & Reynolds, P.C.

CLMN Number of Claims: 29

ECL Exemplary Claim: 1

DRWN 23 Drawing Figure(s); 17 Drawing Page(s)

LN.CNT 2263

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Recombinant mycobacterial \*\*\*vaccine\*\*\* vehicles capable of expressing DNA of interest which encodes at least one protein antigen for at least one pathogen against which an immune response is desired and which can be incorporated into the mycobacteria or stably integrated into the mycobacterial genome. The \*\*\*vaccine\*\*\* vehicles are useful for administration to mammalian hosts for purposes of immunization. A recombinant vector which replicates in *E. coli* but not in mycobacteria is also disclosed. The recombinant vector includes 1) a mycobacterial gene or portions thereof, necessary for recombination with homologous sequences in the genome of mycobacteria transformed with the recombinant plasmid; 2) all or a portion of a gene which encodes a polypeptide or protein whose expression is desired in mycobacteria transformed with the recombinant plasmid; 3) DNA sequences necessary for replication and selection in *E. coli*; and 4) DNA sequences necessary for selection in mycobacteria (e.g., drug resistance). The present invention also relates to two types of recombinant vectors useful in introducing DNA of interest into mycobacteria, where it is expressed. One type of vector is a recombinant phasmid capable of replicating as a plasmid in *E. coli* and of lysogenizing a mycobacterial host. The other type of vector is a recombinant plasmid which can be introduced into mycobacteria, where it is stably maintained extrachromosomally.

L6 ANSWER 32 OF 94 USPATFULL

AN 2001:97606 USPATFULL

TI Assay method utilizing induced luminescence  
IN Ullman, Edwin F., Atherton, CA, United States  
Kirakossian, Hrair, San Jose, CA, United States  
Pease, John S., Los Altos, CA, United States  
Daniloff, Yuri, Mountain View, CA, United States  
Wagner, Daniel B., Sunnyvale, CA, United States  
PA Dade Behring Marburg GmbH, Marburg, Germany, Federal Republic of  
(non-U.S. corporation)  
PI US 6251581 B1 20010626  
AI US 1991-704569 19910522 (7)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Venkat, Jyothsna; Assistant Examiner: Ponnaluri, P.  
LREP Finnegan, Henderson, Farabow, Garrett & Dunner L.L.P., Gattari, Patrick  
G

CLMN Number of Claims: 36

ECL Exemplary Claim: 1

DRWN 8 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 3221

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are disclosed for determining an analyte in a medium suspected of containing the analyte. One method comprises treating a medium suspected of containing an analyte under conditions such that the analyte, if present, causes a photosensitizer and a chemiluminescent compound to come into close proximity. The photosensitizer generates singlet oxygen and activates the chemiluminescent compound when it is in close proximity. The activated chemiluminescent compound subsequently produces light. The amount of light produced is related to the amount of analyte in the medium. Preferably, at least one of the photosensitizer and chemiluminescent compound is associated with a surface which is usually a suspensible particle, and a specific binding pair member is bound thereto. Compositions and kits are also disclosed.

L6 ANSWER 33 OF 94 USPATFULL

AN 2001:93348 USPATFULL

TI Mycobacteria functional screening and/or expression vectors

IN Gicquel, Brigitte, Paris, France

Lim, Eng Mong, Paris, France

Portnoi, Denis, Paris, France

Berhet, Francois-Xavier, Paris, France

Timm, Juliano, Paris, France

PA Institut Pasteur, Paris Cedex, France (non-U.S. corporation)

PI US 6248581 B1 20010619

WO 9607745 19960314

AI US 1997-793701 19970609 (8)

WO 1995-FR1133 19950830

19970609 PCT 371 date

19970609 PCT 102(e) date

PRAI FR 1994-104585 19940902

DT Utility

FS GRANTED

EXNAM Primary Examiner: Swartz, Rodney P.

LREP Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.

CLMN Number of Claims: 21

ECL Exemplary Claim: 1

DRWN 19 Drawing Figure(s); 18 Drawing Page(s)

LN.CNT 1360

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Recombinant screening, cloning and/or expression vector characterized in that it replicates in mycobacteria and contains 1) a mycobacteria functional replicon; 2) a selection marker, 3) a reporter cassette

comprising a) a multiple cloning site (polylinker) b) a transcription terminator which is active in mycobacteria and is located upstream of the polylinker, and c) a coding nucleotide sequence derived from a gene coding for an expression, export and/or secretion protein marker, the nucleotide sequence being deprived of its initiation codon and its regulating sequences. This vector is used for identification and expression of exporter polypeptides, such as the Mycobacterium tuberculosis P28 antigen.

L6 ANSWER 34 OF 94 USPATFULL

AN 2001:59388 USPATFULL

TI Recombinant mycobacteria auxotrophic for diaminopimelate

IN Pavelka, Jr., Martin S., Bronx, NY, United States

Jacobs, Jr., William R., City Island, NY, United States

PA Albert Einstein College of Medicine of Yeshiva University, Bronx, NY, United States (U.S. corporation)

PI US 6221364 B1 20010424

AI US 1996-747177 19961112 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Minnifield, Nita

LREP Amster, Rothstein & Ebenstein

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN 7 Drawing Figure(s); 7 Drawing Page(s)

LN.CNT 1347

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention refers in general to novel recombinant mycobacteria that are auxotrophic for diaminopimelate. In particular, this invention relates to novel auxotrophic recombinant mycobacteria, to methods of making the mycobacteria, and to uses of the mycobacteria to deliver \*\*\*vaccines\*\*\*. This invention also provides for uses of the mycobacteria in drug screening processes.

L6 ANSWER 35 OF 94 USPATFULL

AN 2000:164082 USPATFULL

TI Polynucleotides and polypeptides in pathogenic mycobacteria and their use as diagnostics, \*\*\*vaccines\*\*\* and targets for chemotherapy

IN Hermon-Taylor, John, London, United Kingdom

Doran, Tim, Whillington, Australia

Millar, Douglas, North Ryde, Australia

Tizard, Mark, London, United Kingdom

Loughlin, Mark, London, United Kingdom

Sumar, Nazira, London, United Kingdom

Ford, John, London, United Kingdom

PA St. George's Hospital Medical School, London, United Kingdom (non-U.S. corporation)

PI US 6156322 20001205

WO 9723624 19970703

AI US 1998-91538 19980916 (9)

WO 1996-GB3221 19961223

19980916 PCT 371 date

19980916 PCT 102(e) date

PRAI GB 1995-26178 19951221

DT Utility

FS Granted

EXNAM Primary Examiner: Baskar, P.

LREP Nixon & Vanderhye PC

CLMN Number of Claims: 7

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 2933

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a nucleotide sequence representing a pathogenicity island found in species of pathogenic mycobacteria. The islands are shown as SEQ ID NOs: 3 and 4 and comprises several open reading frames encoding polypeptides. These polypeptides and their use in diagnosis and therapy form a further aspect of the invention.

L6 ANSWER 36 OF 94 USPATFULL

AN 2000:128125 USPATFULL

TI Nucleic acid amplification using single primer

IN Rose, Samuel, Mountain View, CA, United States

Goodman, Thomas C., Mountain View, CA, United States

Western, Linda M., Mountain View, CA, United States

Becker, Martin, Palo Alto, CA, United States

Ullman, Edwin F., Atherton, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PI US 6124090 20000926

AI US 1995-438149 19950509 (8)

RLI Division of Ser. No. US 1994-242931, filed on 16 May 1994 which is a continuation of Ser. No. US 1993-109852, filed on 20 Aug 1993, now abandoned which is a continuation of Ser. No. US 1991-734030, filed on 22 Jul 1991, now abandoned which is a continuation of Ser. No. US 1989-399795, filed on 29 Aug 1989, now abandoned which is a continuation-in-part of Ser. No. US 1989-299282, filed on 19 Jan 1989, now abandoned which is a division of Ser. No. US 1994-194140, filed on 9 Feb 1994, now patented, Pat. No. US 5508178 which is a continuation of Ser. No. US 1992-892412, filed on 1 Jun 1992, now abandoned which is a continuation of Ser. No. US 1989-299282, filed on 19 Jan 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.; Assistant Examiner: Whisenant, Ethan

LREP Leitereg, Theodore J.

CLMN Number of Claims: 65

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 5 Drawing Page(s)

LN.CNT 2173

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for determining the presence of a polynucleotide analyte in a sample suspected of containing the analyte. The method comprises (a) forming as a result of the presence of an analyte a single stranded polynucleotide comprising a target polynucleotide binding sequence flanked by first and second polynucleotide sequences that differ from the sequence of the analyte or a sequence complementary to the analyte sequence, (b) forming multiple copies of the single stranded polynucleotide, and (c) detecting the single stranded polynucleotide. Also disclosed is a method of producing at least one copy of a single stranded polynucleotide. The method comprises (a) forming in the presence of nucleoside triphosphates and template dependent polynucleotide polymerase an extension of a polynucleotide primer at least the 3'-end of which has at least a 10 base sequence hybridizable with a second sequence flanking the 3'-end of the single stranded polynucleotide, the second sequence being partially or fully complementary with at least a 10 base first sequence flanking the 5' end of the single stranded polynucleotide, (b) dissociating the extended polynucleotide primer and the single stranded polynucleotide, (c) repeating step a and (d) dissociating the extended polynucleotide primer and the copy of the single stranded polynucleotide.

L6 ANSWER 37 OF 94 USPATFULL

AN 2000:124779 USPATFULL

TI Detection of nucleic acids by target-catalyzed product formation

IN Western, Linda M., San Mateo, CA, United States

Rose, Samuel J., Los Altos, CA, United States

Ullman, Edwin F., Atherton, CA, United States

PA Dade Behring Marburg GmbH, Marburg, Germany, Federal Republic of  
(non-U.S. corporation)

PI US 6121001 20000919

AI US 1999-440363 19991115 (9)

RLI Continuation of Ser. No. US 1998-15949, filed on 30 Jan 1998 which is a  
continuation of Ser. No. US 1996-691627, filed on 2 Aug 1996, now  
patented, Pat. No. US 5792614 which is a continuation of Ser. No. US  
1994-363169, filed on 23 Dec 1994, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Myers, Carla J.; Assistant Examiner: Johannsen, Diana

LREP Gattari, Patrick

CLMN Number of Claims: 29

ECL Exemplary Claim: 6

DRWN 3 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 1687

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for modifying an oligonucleotide, which method has application to the detection of a polynucleotide analyte. An oligonucleotide is reversibly hybridized with a polynucleotide, for example, a polynucleotide analyte, in the presence of a 5'-nuclease under isothermal conditions. The polynucleotide analyte serves as a recognition element to enable a 5'-nuclease to cleave the oligonucleotide to provide (i) a first fragment that is substantially non-hybridizable to the polynucleotide analyte and (ii) a second fragment that lies 3' of the first fragment (in the intact oligonucleotide) and is substantially hybridizable to the polynucleotide analyte. At least a 100-fold molar excess of the first fragment and/or the second fragment are obtained relative to the molar amount of the polynucleotide analyte. The presence of the first fragment and/or the second fragment is detected, the presence thereof indicating the presence of the polynucleotide analyte. The method has particular application to the detection of a polynucleotide analyte such as DNA. Kits for conducting methods in accordance with the present invention are also disclosed.

L6 ANSWER 38 OF 94 USPATFULL

AN 2000:113705 USPATFULL

TI Oligonucleotide modification, signal amplification, and nucleic acid  
detection by target-catalyzed product formation

IN Western, Linda M., San Mateo, CA, United States

Rose, Samuel J., Los Altos, CA, United States

Ullman, Edwin F., Atherton, CA, United States

PA Dade Behring Marburg GmbH, Marburg, Germany, Federal Republic of  
(non-U.S. corporation)

PI US 6110677 20000829

AI US 1998-15949 19980130 (9)

RLI Continuation of Ser. No. US 1996-691627, filed on 2 Aug 1996, now  
patented, Pat. No. US 5792614 which is a continuation of Ser. No. US  
1994-363169, filed on 23 Dec 1994, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Myers, Carla J.; Assistant Examiner: Johannsen, Diana

LREP Gattari, Patrick G; Leitereg, Theodore J

CLMN Number of Claims: 24

ECL Exemplary Claim: 12

DRWN 3 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 1639

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for modifying an oligonucleotide, which method has application to the detection of a polynucleotide analyte. An oligonucleotide is reversibly hybridized with a polynucleotide, for example, a polynucleotide analyte, in the presence of a 5'-nuclease under isothermal conditions. The polynucleotide analyte serves as a recognition element to enable a 5'-nuclease to cleave the oligonucleotide to provide (i) a first fragment that is substantially non-hybridizable to the polynucleotide analyte and (ii) a second fragment that lies 3' of the first fragment (in the intact oligonucleotide) and is substantially hybridizable to the polynucleotide analyte. At least a 100-fold molar excess of the first fragment and/or the second fragment are obtained relative to the molar amount of the polynucleotide analyte. The presence of the first fragment and/or the second fragment is detected, the presence thereof indicating the presence of the polynucleotide analyte. The method has particular application to the detection of a polynucleotide analyte such as DNA. Kits for conducting methods in accordance with the present invention are also disclosed.

L6 ANSWER 39 OF 94 USPATFULL

AN 2000:34403 USPATFULL

TI Vascular endothelial growth factor 2

IN Hu, Jing-Shan, Sunnyvale, CA, United States

Rosen, Craig A., Laytonsville, MD, United States

Cao, Liang, South Horizons, Hong Kong

PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

PI US 6040157 20000321

AI US 1998-42105 19980313 (9)

RLI Continuation-in-part of Ser. No. US 1997-999811, filed on 24 Dec 1997, now patented, Pat. No. US 5932540 which is a continuation-in-part of Ser. No. US 1997-824996, filed on 27 Mar 1997 And a continuation-in-part of Ser. No. US 1995-465968, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-207550, filed on 8 Mar 1994

DT Utility

FS Granted

EXNAM Primary Examiner: Ulm, John; Assistant Examiner: Saoud, Christine

LREP Human Genome Sciences Inc.

CLMN Number of Claims: 75

ECL Exemplary Claim: 1

DRWN 48 Drawing Figure(s); 47 Drawing Page(s)

LN.CNT 5292

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are human VEGF2 polypeptides, biologically active, diagnostically or therapeutically useful fragments, analogs, or derivatives thereof, and DNA (RNA) encoding such VEGF2 polypeptides. Also provided are procedures for producing such polypeptides by recombinant techniques and antibodies and antagonists against such polypeptides. Such polypeptides may be used therapeutically for stimulating wound healing and for vascular tissue repair. Also provided are methods of using the antibodies and antagonists to inhibit tumor angiogenesis and thus tumor growth, inflammation, diabetic retinopathy, rheumatoid arthritis, and psoriasis.

L6 ANSWER 40 OF 94 USPATFULL

AN 2000:24448 USPATFULL

TI Method for introducing defined sequences at the 3' end of polynucleotides  
IN Laney, Maureen, Palo Alto, CA, United States  
Chen, Yan, Palo Alto, CA, United States  
Ullman, Edwin F., Atherton, CA, United States  
Hahnberger, Karen M., Cupertino, CA, United States  
PA Behring Diagnostics GmbH, Germany, Federal Republic of (non-U.S. corporation)  
PI US 6030774 20000229  
AI US 1995-479745 19950607 (8)  
RLI Continuation of Ser. No. US 1993-140349, filed on 20 Oct 1993, now patented, Pat. No. US 5679512 which is a continuation-in-part of Ser. No. US 1992-923079, filed on 31 Jul 1992, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Campbell, Eggerton A.  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 16 Drawing Figure(s); 16 Drawing Page(s)  
LN.CNT 2341

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for extending a primer to produce a single stranded polydeoxynucleotide that has two or more defined sequences. A combination is provided which comprises a template polynucleotide, a blocker polynucleotide, a primer polynucleotide and a polynucleotide Q. The template polynucleotide has three sequences T1, T2 and T3 wherein T1 is non-contiguous and 3' of T3 and wherein the 5' end of T3 is 5' of the 5' end of T2. The primer polynucleotide has a second defined sequence at its 3' end that is hybridizable with T1. The blocker polynucleotide has sequence B1 that is hybridizable with T3. Polynucleotide Q has sequences S1 and S2 wherein S1 is 3' of S2 and homologous with T2 and S2 is complementary to a first defined sequence that is to be introduced at the 3' end of the polynucleotide primer, when it is extended during the method of the invention. Polynucleotide Q is either attached to the 5' end of the blocker polynucleotide or present as a separate reagent. The primer is extended along the template polynucleotide and along at least a portion of sequence T2 and thereafter along the polynucleotide Q to give a single stranded polynucleotide having two or more defined sequences.

L6 ANSWER 41 OF 94 CAPLUS COPYRIGHT 2002 ACS  
AN 1999:626345 CAPLUS  
DN 131:252546  
TI Diagnostics and \*\*\*vaccines\*\*\* for mycobacterial infections of animals and humans using mpa gene encoding Mycobacterium \*\*\*paratuberculosis\*\*\* acylase

IN Hermon-Taylor, John; Bull, Timothy John  
PA St. George's Hospital Medical School, UK  
SO PCT Int. Appl., 67 pp.  
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 9949054 A1 19990930 WO 1999-GB849 19990318  
W: AU, CA, JP, NZ, US  
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE  
AU 9929472 A1 19991018 AU 1999-29472 19990318

EP 1062347 A1 20001227 EP 1999-910540 19990318  
R: BE, DE, DK, FR, GB, NL, IE  
PRAI GB 1998-6093 A 19980320  
WO 1999-GB849 W 19990318

AB This invention relates to the protein, Mycobacterium \*\*\*paratuberculosis\*\*\* acylase (mpa) and the gene encoding mpa, which the authors have identified in the pathogen Mycobacterium \*\*\*paratuberculosis\*\*\* Mptb (also designated Mycobacterium avium subspecies \*\*\*paratuberculosis\*\*\* MAP), and to their use in the diagnosis of Mptb/MAP infections in animals and humans, as well as their use as components of \*\*\*vaccines\*\*\* for the prevention and treatment of diseases caused by Mptb/MAP. The importance of an intact uninterrupted mpa gene as a determinant of pathogenicity in Mptb/MAP is recognized and the invention also provides attenuated strains of normally pathogenic Mptb/MAP and other mycobacteria in which mpa has been inactivated, for use as \*\*\*vaccines\*\*\*.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 42 OF 94 USPATFULL  
AN 1999:163855 USPATFULL  
TI Chemiluminescent compounds and methods of use  
IN Singh, Sharat, San Jose, CA, United States  
Singh, Rajendra, Mountain View, CA, United States  
Meneghini, Frank, Keene, NH, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Dade Behring Marburg GmbH, Marburg, Germany, Federal Republic of (non-U.S. corporation)  
PI US 6002000 19991214  
AI US 1996-661849 19960611 (8)  
RLI Division of Ser. No. US 1995-373678, filed on 17 Jan 1995, now patented, Pat. No. US 5545834 which is a continuation of Ser. No. US 1992-916453, filed on 20 Jul 1992, now abandoned

DT Utility  
FS Granted  
EXNAM Primary Examiner: Ford, John M.; Assistant Examiner: Kifle, Bruck  
LREP Leitereg, Theodore J  
CLMN Number of Claims: 11  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 1805

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Methods are disclosed for determining an analyte in a medium suspected of containing the analyte. One method comprises providing (1) combining a medium suspected of containing the analyte and a novel chemiluminescent compound, (2) combining a means for chemically activating the chemiluminescent compound; and (3) detecting the amount of luminescence generated by the chemiluminescent compound. The amount of luminescence generated is related to the amount of analyte in the medium. The chemiluminescent compound can be chemically activated by hydrogen peroxide. Compositions and kits are also disclosed.

L6 ANSWER 43 OF 94 USPATFULL  
AN 1999:155521 USPATFULL  
TI L5 shuttle phasmids  
IN Jacobs, William R., City Island, NY, United States  
Hatfull, Graham F., Pittsburgh, PA, United States  
Bardarov, Stoyan, Bronx, NY, United States  
McAdam, Ruth, Essendon, United Kingdom  
PA Albert Einstein College of Medicine of Yeshiva University, Bronx, NY, United States (U.S. corporation)

University of Pittsburgh, Pittsburgh, PA, United States (U.S.  
corporation)

PI US 5994137 19991130

AI US 1998-75904 19980511 (9)

RLI Continuation of Ser. No. US 1994-247901, filed on 23 May 1994, now  
patented, Pat. No. US 5750384, issued on 12 May 1998 which is a  
continuation-in-part of Ser. No. US 1993-57531, filed on 29 Apr 1993,  
now abandoned which is a continuation-in-part of Ser. No. US  
1992-833431, filed on 7 Feb 1992, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Degen, Nancy; Assistant Examiner: Schwartzman, Robert  
LREP Amster, Rothstein & Ebenstein

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN 21 Drawing Figure(s); 18 Drawing Page(s)

LN.CNT 2996

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to L5 shuttle phasmids capable of delivering  
foreign DNA into mycobacteria and to methods of producing L5 shuttle  
phasmids. In addition, this invention is directed to a method of  
generating mycobacterial \*\*\*mutations\*\*\* and to a method of  
producing mycobacterial \*\*\*vaccines\*\*\* .

L6 ANSWER 44 OF 94 USPATFULL

AN 1999:128431 USPATFULL

TI Promoter of M. \*\*\*paratuberculosis\*\*\* and its use for the expression  
of immunogenic sequences

IN Murray, Alan, Palmerston North, New Zealand  
Gheorghiu, Marina, Neuilly-Sur-Seine, France  
Gicquel, Brigitte, Paris, France

PA Institut Pasteur, Paris Cedex, France (non-U.S. corporation)  
Massey University, Palmerston North, New Zealand (non-U.S. corporation)

PI US 5968815 19991019

WO 9308284 19930429

AI US 1994-211718 19941006 (8)

WO 1992-EP2431 19921023

19941006 PCT 371 date

19941006 PCT 102(e) date

PRAI FR 1991-13227 19911025

DT Utility

FS Granted

EXNAM Primary Examiner: Guzo, David; Assistant Examiner: Degen, Nancy J.  
LREP Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

CLMN Number of Claims: 45

ECL Exemplary Claim: 1

DRWN 54 Drawing Figure(s); 50 Drawing Page(s)

LN.CNT 1643

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a nucleotide sequence which is present at a  
position adjacent to the 5' end of the reverse sequence complementary to  
the open reading frame coding for a potential transposase contained in  
the insertion element IS900 in Mycobacterium \*\*\*paratuberculosis\*\*\* .  
The nucleotide sequence has promoter functions and contains important  
signals for the regulation of transcription and translation. The  
invention also relates to methods for cloning and expressing  
heterologous proteins using such regulatory sequences, to vectors and  
transformed host cells containing these sequences, and to immunogenic  
compositions prepared by expression of nucleotide sequences placed under  
control of these regulatory sequences.

L6 ANSWER 45 OF 94 USPATFULL

AN 1999:128349 USPATFULL

TI Mycobacteriophages and uses thereof

IN Bloom, Barry R., Hastings on Hudson, NY, United States

Davis, Ronald W., Palo Alto, CA, United States

Jacobs, Jr., William R., Bronx, NY, United States

Young, Richard A., Winchester, MA, United States

Husson, Robert N., Takoma Park, MD, United States

PA Albert Einstein College of Medicine of Yeshiva University, Bronx, NY, United States (U.S. corporation)

The Board of Trustees of the Leland Stanford, Jr. University, Stanford, CA, United States (U.S. corporation)

Whitehead Institute for Biomedical Research, Cambridge, MA, United States (U.S. corporation)

PI US 5968733 19991019

AI US 1998-14560 19980128 (9)

RLI Continuation of Ser. No. US 1995-463942, filed on 5 Jun 1995, now patented, Pat. No. US 5854055 which is a continuation of Ser. No. US 1989-361944, filed on 5 Jun 1989, now patented, Pat. No. US 5504005 which is a continuation-in-part of Ser. No. US 1988-223089, filed on 22 Jul 1988, now abandoned And a continuation-in-part of Ser. No. US 1988-216390, filed on 7 Jul 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-163546, filed on 3 Mar 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-20451, filed on 2 Mar 1987, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: LeGuyader, John L.

LREP Amster, Rothstein & Ebenstein

CLMN Number of Claims: 26

ECL Exemplary Claim: 1

DRWN 26 Drawing Figure(s); 17 Drawing Page(s)

LN.CNT 2220

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Recombinant mycobacterial \*\*\*vaccine\*\*\* vehicles capable of expressing DNA of interest which encodes at least one protein antigen for at least one pathogen against which an immune response is desired and which can be incorporated into the mycobacteria or stably integrated into the mycobacterial genome. The \*\*\*vaccine\*\*\* vehicles are useful for administration to mammalian hosts for purposes of immunization. A recombinant vector which replicates in *E. coli* but not in mycobacteria is also disclosed. The recombinant vector includes 1) a mycobacterial gene or portions thereof, necessary for recombination with homologous sequences in the genome of mycobacteria transformed with the recombinant plasmid; 2) all or a portion of a gene which encodes a polypeptide or protein whose expression is desired in mycobacteria transformed with the recombinant plasmid; 3) DNA sequences necessary for replication and selection in *E. coli*; and 4) DNA sequences necessary for selection in mycobacteria (e.g., drug resistance). The present invention also relates to two types of recombinant vectors useful in introducing DNA of interest into mycobacteria, where it is expressed. One type of vector is a recombinant phasmid capable of replicating as a plasmid in *E. coli* and of lysogenizing a mycobacterial host. The other type of vector is a recombinant plasmid which can be introduced into mycobacteria, where it is stably maintained extrachromosomally.

L6 ANSWER 46 OF 94 USPATFULL

AN 1999:92783 USPATFULL

TI Chemiluminescent compounds and methods of use

IN Singh, Sharat, San Jose, CA, United States

Singh, Rajendra, Mountain View, CA, United States

Meneghini, Frank, Keene, NH, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Dade Behring Marburg GmbH, Marburg, Germany, Federal Republic of (non-U.S. corporation)  
PI US 5936070 19990810  
AI US 1996-664269 19960611 (8)  
RLI Division of Ser. No. US 1995-373678, filed on 17 Jan 1995, now patented, Pat. No. US 5545834 which is a continuation of Ser. No. US 1992-916453, filed on 20 Jul 1992, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Ceperley, Mary E.  
LREP Leitereg, Theodore J  
CLMN Number of Claims: 9  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 1818  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Methods are disclosed for determining an analyte in a medium suspected of containing the analyte. One method comprises providing (1) combining a medium suspected of containing the analyte and a novel chemiluminescent compound, (2) combining a means for chemically activating the chemiluminescent compound; and (3) detecting the amount of luminescence generated by the chemiluminescent compound. The amount of luminescence generated is related to the amount of analyte in the medium. The chemiluminescent compound can be chemically activated by hydrogen peroxide. Compositions and kits are also disclosed.

The chemiluminiscent compound is a spiro-acridan and has ##STR1## where X and Y are independently O, S, Se or NH; and Z is a chain 1-5 atoms in length; 0 to 8 hydrogens of the compound alone or taken together, may be replaced an alkyl, alkylidene, aryl aralkyl, or an alkyl, aryl or aralkyl substituted with one or more radicals of functional groups; 1 to 4 of the aromatic carbon atoms may be replaced by nitrogen atoms; and 0 to 1 hydrogens may be replaced by a specific binding pair member or fluorescent group.

L6 ANSWER 47 OF 94 USPATFULL  
AN 1999:69620 USPATFULL  
TI Homogeneous amplification and detection of nucleic acids  
IN Liu, Yen Ping, Cupertino, CA, United States  
Patel, Rajesh D., Fremont, CA, United States  
Kurn, Nurith, Palo Alto, CA, United States  
Lin, Claire, Palo Alto, CA, United States  
Rose, Samuel J., Los Altos, CA, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Dade Behring Inc., Deerfield, IL, United States (U.S. corporation)  
PI US 5914230 19990622  
AI US 1996-771624 19961220 (8)  
PRAI US 1995-9090P 19951222 (60)

DT Utility  
FS Granted  
EXNAM Primary Examiner: Degen, Nancy; Assistant Examiner: Yucel, Irem  
LREP Leitereg, Theodore J  
CLMN Number of Claims: 53  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 2874  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method for detecting or amplifying and detecting a target polynucleotide sequence. The method comprises

providing in combination (i) a medium suspected of containing the target polynucleotide sequence, (ii) all reagents required for conducting an amplification of the target polynucleotide sequence when amplification is desired, and (iii) two oligonucleotide probes capable of binding to a single strand of the product of the amplification. At least one of the probes has two sequences that either (i) are non-contiguous and bind to contiguous or non-contiguous sites on the single strand or (ii) can bind to non-contiguous sites on the single strand. Each probe may contain a label. The combination is subjected to conditions for amplifying the target polynucleotide sequence. Next, the combination is subjected to conditions under which both of the probes hybridize to one of the strands to form a termolecular complex, which is detected by means of the label.

L6 ANSWER 48 OF 94 USPATFULL

AN 1999:33776 USPATFULL

TI Detection of nucleic acids by formation of template-dependent product

IN Ullman, Edwin F., Atherton, CA, United States  
Western, Linda M., San Mateo, CA, United States

Rose, Samuel J., Los Altos, CA, United States

PA Dade Behring Marburg GmbH, Marburg, Germany, Federal Republic of  
(non-U.S. corporation)

PI US 5882867 19990316

AI US 1995-486301 19950607 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Whisenant, Ethan

LREP Leitereg, Theodore J.

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 8 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 1537

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for detecting a target polynucleotide sequence.

The method comprises incubating an oligonucleotide with the target polynucleotide sequence and a nucleotide polymerase under isothermal conditions wherein at least one nucleotide is added to the 3'-terminus of the oligonucleotide to provide an extended oligonucleotide having the additional nucleotides. The presence of extended oligonucleotide is detected as an indication of the presence of the target polynucleotide sequence. The method has particular application to the detection of DNA.

L6 ANSWER 49 OF 94 USPATFULL

AN 1999:33768 USPATFULL

TI Internal positive controls for nucleic acid amplification

IN Western, Linda M., San Mateo, CA, United States  
Rose, Samuel J., Los Altos, CA, United States  
Ullman, Edwin F., Atherton, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S.  
corporation)

PI US 5882857 19990316

AI US 1995-475283 19950607 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Rees, Dianne

LREP Leitereg, Theodore J.

CLMN Number of Claims: 61

ECL Exemplary Claim: 1

DRWN 5 Drawing Figure(s); 5 Drawing Page(s)

LN.CNT 2081

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to an improvement in a method for amplifying a target sequence of a target polynucleotide. The method comprises combining a sample suspected of containing the target polynucleotide with reagents for amplifying the target sequence and subjecting the combination to conditions wherein the target sequence if present is amplified. The present improvement comprises including in the combination a control oligonucleotide and a control polynucleotide that has a sequence that is hybridizable with the control oligonucleotide. When the control oligonucleotide is bound to the control polynucleotide, the ability of a primer to chain extend along the control polynucleotide is reduced. Optionally, the control oligonucleotide is part of the control polynucleotide. The method finds particular application in the area of nucleic acid amplification and detection.

L6 ANSWER 50 OF 94 USPATFULL

AN 1999:21886 USPATFULL

TI Sequence-specific detection of nucleic acid hybrids using a DNA-binding molecule or assembly capable of discriminating perfect hybrids from non-perfect hybrids

IN Weininger, Susan, Seattle, WA, United States  
Weininger, Arthur M., Seattle, WA, United States

PA The Gene Pool, Inc., Seattle, WA, United States (U.S. corporation)

PI US 5871902 19990216

AI US 1994-353476 19941209 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Horlick, Kenneth R.

LREP Saliwanchik, Lloyd & Saliwanchik

CLMN Number of Claims: 40

ECL Exemplary Claim: 3

DRWN 27 Drawing Figure(s); 27 Drawing Page(s)

LN.CNT 3956

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is a novel method for detecting and localizing specific nucleic acid sequences in a sample with a high degree of sensitivity and specificity. The method and novel compositions used in the method involve the use of Probe Nucleic Acids, the production of nucleic acid binding regions and the use of nucleic acid Target Binding Assemblies to detect and localize specific Target Nucleic Acids. The detection and localization of the Target Nucleic Acid is accomplished even in the presence of nucleic acids which have similar sequences. The method provides for a high degree of amplification of the signal produced by each specific binding event. In particular, methods and compositions are presented for the detection of HIV and HPV DNA in samples. These methods and compositions find use in diagnosis of disease, genetic monitoring, forensics, and analysis of nucleic acid mixtures. Some of the novel compositions used in the detection method are useful in preventing or treating pathogenic conditions.

L6 ANSWER 51 OF 94 USPATFULL

AN 1999:18729 USPATFULL

TI Recombinant \*\*\*vaccines\*\*\* to break self-tolerance

IN Rock, Edwin P., 4535 Hawthorne St., Washington, DC, United States 20016

PI US 5869057 19990209

AI US 1997-944982 19971007 (8)

RLI Continuation of Ser. No. US 1995-472455, filed on 7 Jun 1995, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Achutamurthy, Ponnathapura; Assistant Examiner: Bui, Phuong T.

LREP Keil & Weinkauf

CLMN Number of Claims: 5

ECL Exemplary Claim: 1

DRWN 20 Drawing Figure(s); 12 Drawing Page(s)

LN.CNT 2000

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to \*\*\*vaccines\*\*\* , specifically to the use of recombinant DNA technology to immunize against self proteins and to induce antibody against self protein in mammals. A process is described in which DNA sequences encoding a microbial gene product and a self gene protein are joined and expressed by means of a suitable DNA vector and a non-pathogenic microbial strain. The present invention further relates to the isolation and purification of a fusion peptide combining the non-toxic B subunit of an enterotoxigenic strain of E. coli (LTB) with the carboxyl terminal peptide (CTP) of human chorionic gonadotropin (hCG), as well as to the use of this fusion protein for immunological prophylaxis and therapy.

L6 ANSWER 52 OF 94 USPATFULL

AN 1998:115714 USPATFULL

TI Pharmaceutical dipeptide compositions and methods of use thereof:  
immunodepressants

IN Khavinson, Vladimir Kh., St. Petersburg, Russian Federation

Morozov, Vyacheslav G., St. Petersburg, Russian Federation

PA Cytran, Inc., Kirkland, WA, United States (U.S. corporation)

PI US 5811399 19980922

AI US 4509048 19950526 (8)

RLI Continuation-in-part of Ser. No. 278463, filed on 21 Jul 1994, now abandoned And Ser. No. 337341, filed on 10 Nov 1994, now patented, Pat. No. 5538951 which is a continuation-in-part of Ser. No. 257495, filed on 7 Jun 1994, now abandoned which is a continuation of Ser. No. 783518, filed on 28 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. 678129, filed on 1 Apr 1991, now abandoned which is a continuation-in-part of Ser. No. 415283, filed on 30 Aug 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Harle, Jennifer

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN 14 Drawing Figure(s); 7 Drawing Page(s)

LN.CNT 8863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of treatment of subjects for decreasing cell mediated autoimmunity or humoral autoimmunity by administering an R'-Glu-Trp-R" pharmaceutical preparation useful in subjects having autoimmune diseases.

L6 ANSWER 53 OF 94 CAPLUS COPYRIGHT 2002 ACS

AN 1998:338145 CAPLUS

DN 129:24153

TI Recombinant mycobacteria auxotrophic for diaminopimelate with \*\*\*mutations\*\*\* in the aspartokinase and/or aspartic .beta.-semialdehyde dehydrogenase genes

IN Pavelka, Martin S., Jr.; Jacobs, William, Jr.

PA Albert Einstein College of Medicine of Yeshiva University, USA

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9820898	A1	19980522	WO 1997-US20276	19971111
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6221364	B1	20010424	US 1996-747177	19961112
AU 9853549	A1	19980603	AU 1998-53549	19971111
EP 959902	A1	19991201	EP 1997-950585	19971111
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI US 1996-747177 A 19961112 WO 1997-US20276 W 19971111				
AB The present invention refers in general to novel recombinant mycobacteria that are auxotrophic for diaminopimelate. Specifically, the recombinant auxotrophic mycobacteria contain ***mutations*** in the aspartokinase gene ask and/or the L-aspartic-.beta.-semialdehyde dehydrogenase gene asd. The essentiality of these particular genes is detd. using a novel counter-selectable marker system based upon the well-known phenomenon that streptomycin resistance mediated by ***mutations*** in the <i>rspL</i> gene (encoding ribosomal protein S12) is recessive to the wild-type <i>rspL</i> gene. The counter-selection system for allelic exchange uses a strain with a chromosomal ***mutation*** in <i>rspL</i> conferring streptomycin resistance (mc21255), and the wild-type <i>rspL</i> gene cloned in a suicide vector unable to replicate in mycobacteria pYUB608. The mycobacterium may be ***mutated*** by illegitimate recombination of DNA into the mycobacterial chromosome, or by homologous recombination, or by the insertion of a mycobacterial transposon into a mycobacterial gene, or by the transfection of a mycobacterium with a vector which includes a pair of inverted repeat sequences and DNA encoding a transposase. In particular, this invention relates to novel auxotrophic recombinant mycobacteria, to methods of making the mycobacteria, and to uses of the mycobacteria to deliver ***vaccines*** and in the prevention and treatment of diseases or conditions assocd. with mycobacteria. This invention also provides for uses of the mycobacteria in drug screening processes.				
L6	ANSWER 54 OF 94	USPATFULL		
AN	1998:162325	USPATFULL		
TI	Recombinant mycobacteria			
IN	Bloom, Barry R., Hastings on Hudson, NY, United States			
	Jacobs, Jr., William R., Bronx, NY, United States			
	Davis, Ronald W., Palo Alto, CA, United States			
	Young, Richard A., Winchester, MA, United States			
	Husson, Robert N., Takoma Park, MD, United States			
PA	Albert Einstein College of Medicine of Yeshiva University, a Division of Yeshiva University, Bronx, NY, United States (U.S. corporation)			
PI	US 5854055	19981229		
AI	US 1995-463942	19950605 (8)		
RLI	Continuation of Ser. No. US 1989-361944, filed on 5 Jun 1989, now patented, Pat. No. US 5504005 which is a continuation-in-part of Ser. No. US 1988-223089, filed on 22 Jul 1988, now abandoned And Ser. No. US 1988-216390, filed on 7 Jul 1988, now abandoned , said Ser. No. US -361944 Ser. No. Ser. No. US -223089 And Ser. No. US -216390 which is a continuation-in-part of Ser. No. US 1988-163546, filed on 3 Mar 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-20451, filed on 2 Mar 1987, now abandoned			

DT Utility

FS Granted

EXNAM Primary Examiner: Guzo, David; Assistant Examiner: MGarry, Sean

LREP Amster, Rothstein & Ebenstein

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN 23 Drawing Figure(s); 17 Drawing Page(s)

LN.CNT 2205

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Recombinant mycobacterial \*\*\*vaccine\*\*\* vehicles capable of expressing DNA of interest which encodes at least one protein antigen for at least one pathogen against which an immune response is desired and which can be incorporated into the mycobacteria or stably integrated into the mycobacterial genome. The \*\*\*vaccine\*\*\* vehicles are useful for administration to mammalian hosts for purposes of immunization. A recombinant vector which replicates in *E. coli* but not in mycobacteria is also disclosed. The recombinant vector includes 1) a mycobacterial gene or portions thereof, necessary for recombination with homologous sequences in the genome of mycobacteria transformed with the recombinant plasmid; 2) all or a portion of a gene which encodes a polypeptide or protein whose expression is desired in mycobacteria transformed with the recombinant plasmid; 3) DNA sequences necessary for replication and selection in *E. coli*; and 4) DNA sequences necessary for selection in mycobacteria (e.g., drug resistance). The present invention also relates to two types of recombinant vectors useful in introducing DNA of interest into mycobacteria, where it is expressed. One type of vector is a recombinant plasmid capable of replicating as a plasmid in *E. coli* and of lysogenizing a mycobacterial host. The other type of vector is a recombinant plasmid which can be introduced into mycobacteria, where it is stably maintained extrachromosomally.

L6 ANSWER 55 OF 94 USPATFULL

AN 1998:159695 USPATFULL

TI Probes, kits and methods for the detection and differentiation of mycobacteria

IN McAdam, Ruth Anne, Bronx, NY, United States

Dale, Jeremy Watson, Guildford, United Kingdom

Zainuddin, Zainul Fadziruddin Bin, Penang, Malaysia

Catty, David, Birmingham, England

PA Cogent Limited, United Kingdom (non-U.S. corporation)

PI US 5851761 19981222

AI US 1993-160524 19931201 (8)

RLI Division of Ser. No. US 1991-752661, filed on 18 Oct 1991, now abandoned

PRAI GB 1989-3968 19890222

GB 1990-411 19900109

DT Utility

FS Granted

EXNAM Primary Examiner: Houtteman, Scott W.

LREP Dreger, Walter H., Brunelle, Jan P.

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN 19 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 1100

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides nucleotide probes, kits and methods for the detection and differentiation of Mycobacteria. The gene probes, kits and methods are useful for the diagnosis of tuberculosis and/or for epidemiological study tools for investigating the progress of infections caused by Mycobacteria.

The gene probes as provided comprise part or all of nucleotide sequences

provided in the specification or an allele or a derivative of the nucleotide sequences.

The gene probes can distinguish between M.tuberculosis, M.bovis and BCG as well as being able to distinguish between different strains of M.tuberculosis. The probes do not show significant hybridisation to nucleic acids from M. \*\*\*paratuberculosis\*\*\* , M.intracellulare, M.scrofulaceum, M.phlei, M.fortuitum, M.kansasii, M.avium, M.malnioense. M.flavescens, M.gordonae and M.chelonei.

L6 ANSWER 56 OF 94 USPATFULL

AN 1998:131529 USPATFULL

TI Kits for nucleic acid amplification kit using single primer

IN Rose, Samuel, Mountain View, CA, United States

Goodman, Thomas C., Mountain View, CA, United States

Western, Linda M., Mountain View, CA, United States

Becker, Martin, Palo Alto, CA, United States

Ullman, Edwin F., Atherton, CA, United States

PA Behring Diagnostics GmbH, Deerfield, IL, United States (U.S. corporation)

PI US 5827649 19981027

AI US 1994-242931 19940516 (8)

RLI Continuation of Ser. No. US 1993-109852, filed on 20 Aug 1993, now abandoned which is a continuation of Ser. No. US 1991-734030, filed on 22 Jul 1991, now abandoned which is a continuation of Ser. No. US 1989-399795, filed on 29 Aug 1989, now abandoned which is a continuation-in-part of Ser. No. US 1989-299282, filed on 19 Jan 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Marschel, Ardin H.

LREP Leitereg, Theodore J.

CLMN Number of Claims: 5

ECL Exemplary Claim: 1

DRWN 8 Drawing Figure(s); 5 Drawing Page(s)

LN.CNT 1889

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for determining the presence of a polynucleotide analyte in a sample suspected of containing the analyte. The method comprises (a) forming as a result of the presence of an analyte a single stranded polynucleotide comprising a target polynucleotide binding sequence flanked by first and second polynucleotide sequences that differ from the sequence of the analyte or a sequence complementary to the analyte sequence, (b) forming multiple copies of the single stranded polynucleotide, and (c) detecting the single stranded polynucleotide. Also disclosed is a method of producing at least one copy of a single stranded polynucleotide. The method comprises (a) forming in the presence of nucleoside triphosphates and template dependent polynucleotide polymerase an extension of a polynucleotide primer at least the 3'-end of which has at least a 10 base sequence hybridizable with a second sequence flanking the 3'-end of the single stranded polynucleotide, the second sequence being partially or fully complementary with at least a 10 base first sequence flanking the 5' end of the single stranded polynucleotide, (b) dissociating the extended polynucleotide primer and the single stranded polynucleotide, (c) repeating step a and (d) dissociating the extended polynucleotide primer and the copy of the single stranded polynucleotide.

L6 ANSWER 57 OF 94 USPATFULL

AN 1998:111911 USPATFULL

TI Method for treatment of purulent inflammatory diseases

IN Morozov, Vyacheslav G., St. Petersburg, Russian Federation  
Khavinson, Vladimir Kh., St. Petersburg, Russian Federation  
PA Cytoven J.V., Kirkland, WA, United States (U.S. corporation)  
PI US 5807830 19980915  
AI US 1995-452061 19950526 (8)  
RLI Continuation-in-part of Ser. No. US 1994-337341, filed on 10 Nov 1994,  
now patented, Pat. No. US 5538951 And a continuation-in-part of Ser. No.  
US 1994-278463, filed on 21 Jul 1994, now abandoned which is a  
continuation-in-part of Ser. No. US 1994-257495, filed on 7 Jun 1994,  
now abandoned which is a continuation of Ser. No. US 1991-783518, filed  
on 28 Oct 1991, now abandoned which is a continuation-in-part of Ser.  
No. US 1991-678129, filed on 1 Apr 1991, now abandoned which is a  
continuation-in-part of Ser. No. US 1989-415283, filed on 30 Aug 1989,  
now abandoned

PRAI SU 1987-4352833 19871230

DT Utility

FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Fredman, Jeffrey

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 8 Drawing Page(s)

LN.CNT 8879

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods of treating purulent inflammatory  
diseases by administering L-Glu-L-Trp or a salt thereof.

L6 ANSWER 58 OF 94 USPATFULL

AN 1998:95391 USPATFULL

TI Detection of nucleic acids by target-catalyzed product formation

IN Western, Linda M., San Mateo, CA, United States

Rose, Samuel J., Los Altos, CA, United States

Ullman, Edwin F., Atherton, CA, United States

PA Dade Behring Marburg GmbH, Deerfield, IL, United States (U.S.  
corporation)

PI US 5792614 19980811

AI US 1996-691627 19960802 (8)

RLI Continuation of Ser. No. US 1994-363169, filed on 23 Dec 1994, now  
abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.

LREP Leitereg, Theodore J., Maiorana, David M.

CLMN Number of Claims: 26

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 1589

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for modifying an oligonucleotide, which method has  
application to the detection of a polynucleotide analyte. An  
oligonucleotide is reversibly hybridized with a polynucleotide, for  
example, a polynucleotide analyte, in the presence of a 5'-nuclease  
under isothermal conditions. The polynucleotide analyte serves as a  
recognition element to enable a 5'-nuclease to cleave the  
oligonucleotide to provide (i) a first fragment that is substantially  
non-hybridizable to the polynucleotide analyte and (ii) a second  
fragment that lies 3' of the first fragment (in the intact  
oligonucleotide) and is substantially hybridizable to the polynucleotide  
analyte. At least a 100-fold molar excess of the first fragment and/or  
the second fragment are obtained relative to the molar amount of the  
polynucleotide analyte. The presence of the first fragment and/or the  
second fragment is detected, the presence thereof indicating the

presence of the polynucleotide analyte. The method has particular application to the detection of a polynucleotide analyte such as DNA. Kits for conducting methods in accordance with the present invention are also disclosed.

L6 ANSWER 59 OF 94 USPATFULL  
AN 1998:85774 USPATFULL  
TI Mycobacteria virulence factors and a novel method for their identification  
IN Jacobs, Jr., William R., City Island, NY, United States  
Bloom, Barry R., Hastings-on-Hudson, NY, United States  
Collins, Desmond Michael, Wellington, New Zealand  
de Lisle, Geoffrey W., Wellington, New Zealand  
Pascopella, Lisa, Hamilton, MT, United States  
Kawakami, Riku Pamela, Wellington, New Zealand  
PA Agresearch, New Zealand Pastoral Agriculture Research Institute Ltd.,  
New Zealand (non-U.S. corporation)  
Albert Einstein College of Medicine of Yeshiva University, Bronx, NY,  
United States (U.S. corporation)  
PI US 5783386 19980721  
AI US 1994-363255 19941223 (8)  
RLI Continuation-in-part of Ser. No. US 1994-292695, filed on 18 Aug 1994,  
now abandoned which is a continuation-in-part of Ser. No. US  
1994-265579, filed on 24 Jun 1994, now abandoned which is a  
continuation-in-part of Ser. No. US 1994-201880, filed on 24 Feb 1994,  
now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Swartz, Rodney  
P.  
LREP Morrison & Foerster LLP  
CLMN Number of Claims: 3  
ECL Exemplary Claim: 1  
DRWN 34 Drawing Figure(s); 32 Drawing Page(s)  
LN.CNT 2923  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Polynucleotides associated with virulence in mycobacteria, and particularly a fragment of DNA isolated from *M. bovis* that contains a region encoding a putative sigma factor. Also provided are methods for a DNA sequence or sequences associated with virulence determinants in mycobacteria, and particularly in *M. tuberculosis* and *M. bovis*. The invention also provides corresponding polynucleotides associated with avirulence in mycobacteria. In addition, the invention provides a method for producing strains with altered virulence or other properties which can themselves be used to identify and manipulate individual genes.

L6 ANSWER 60 OF 94 USPATFULL  
AN 1998:72601 USPATFULL  
TI Pharmaceutical dipeptide compositions and methods of use thereof:  
systemic toxicity  
IN Morozov, Vyacheslav G., St. Petersburg, Russian Federation  
Khavinson, Vladimir Kh., St. Petersburg, Russian Federation  
PA Cytran, Inc., Kirkland, WA, United States (U.S. corporation)  
PI US 5770576 19980623  
AI US 1995-452077 19950526 (8)  
RLI Continuation of Ser. No. US 1994-337341, filed on 10 Nov 1994, now patented, Pat. No. US 5538951 which is a division of Ser. No. US 1989-415283, filed on 30 Aug 1989 And a continuation-in-part of Ser. No. US 1994-278463, filed on 21 Jul 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-257495, filed on 7 Jun 1994, now abandoned which is a continuation of Ser. No. US 1991-783518, filed

on 28 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-678129, filed on 1 Apr 1991, now abandoned which is a continuation-in-part of Ser. No. US 1989-415283, filed on 30 Aug 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Robinson, Douglas W.; Assistant Examiner: Harle, Jennifer

CLMN Number of Claims: 13

ECL Exemplary Claim: 1

DRWN 14 Drawing Figure(s); 7 Drawing Page(s)

LN.CNT 8823

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of treatment of subjects with systemic toxicity by administering an R'-Glu-Trp-R" pharmaceutical preparation.

L6 ANSWER 61 OF 94 USPATFULL

AN 1998:51467 USPATFULL

TI L5 shuttle phasmids

IN Jacobs, William R., City Island, NY, United States

Hatfull, Graham F., Pittsburgh, PA, United States

Bardarov, Stoyan, Bronx, NY, United States

McAdam, Ruth, Utrecht, Netherlands

PA Albert Einstein College of Medicine of Yeshiva University, a division of Yeshiva University, Bronx, NY, United States (U.S. corporation)

University of Pittsburgh, PA, United States (U.S. corporation)

PI US 5750384 19980512

AI US 1994-247901 19940523 (8)

RLI Continuation-in-part of Ser. No. US 1993-57531, filed on 29 Apr 1993,

now abandoned which is a continuation-in-part of Ser. No. US

1992-833431, filed on 7 Feb 1992, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Elliott, George C.; Assistant Examiner: Schwartzman, Robert

LREP Amster, Rothstein & Ebenstein

CLMN Number of Claims: 20

ECL Exemplary Claim: 15

DRWN 19 Drawing Figure(s); 19 Drawing Page(s)

LN.CNT 1850

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to L5 shuttle phasmids capable of delivering foreign DNA into mycobacteria and to methods of producing L5 shuttle phasmids. In addition, this invention is directed to a method of generating mycobacterial \*\*\*mutations\*\*\* and to a method of producing mycobacterial \*\*\*vaccines\*\*\* .

L6 ANSWER 62 OF 94 USPATFULL

AN 1998:36577 USPATFULL

TI Vectors and prokaryotes which autocatalytically delete antibiotic resistance

IN Haun, Shirley L., Gaithersburg, MD, United States

Stover, Charles K., Mercer Island, WA, United States

Hatfull, Graham, Pittsburgh, PA, United States

Hanson, Mark S., Columbia, MD, United States

Jacobs, William R., City Island, NY, United States

PA MedImmune, Inc., Gaithersburg, MD, United States (U.S. corporation)

PI US 5736367 19980407

AI US 1995-425380 19950420 (8)

RLI Continuation-in-part of Ser. No. US 1992-861002, filed on 31 Mar 1992

DT Utility

FS Granted  
EXNAM Primary Examiner: Fleisher, Mindy; Assistant Examiner: Weiss, Bonnie D.  
LREP Herron, Charles J., Olstein, Elliot M.  
CLMN Number of Claims: 14  
ECL Exemplary Claim: 1  
DRWN 42 Drawing Figure(s); 39 Drawing Page(s)  
LN.CNT 1027

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A vector and a prokaryote transformed therewith which includes nucleic acid sequences which make possible the autocatalytic deletion of nucleotide sequences encoding an antibiotic resistance phenotype. The prokaryote can be a bacterium, and in particular a mycobacterium. Such transformed mycobacteria may be employed in \*\*\*vaccines\*\*\*, thereby eliminating the attendant risk of \*\*\*vaccines\*\*\* including antibiotic resistance markers.

L6 ANSWER 63 OF 94 USPATFULL

AN 1998:28061 USPATFULL

TI Methods for normalizing numbers of lymphocytes  
IN Morozov, Vyacheslav G., St. Petersburg, Russian Federation  
Khavinson, Vladimir Kh., St. Petersburg, Russian Federation  
PA Cytoven J.V., Kirkland, WA, United States (U.S. corporation)  
PI US 5728680 19980317  
AI US 1995-452411 19950526 (8)  
RLI Continuation-in-part of Ser. No. US 1994-337341, filed on 10 Nov 1994, now patented, Pat. No. US 5538951 And a continuation-in-part of Ser. No. US 1994-278463, filed on 21 Jul 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-257495, filed on 7 Jun 1994, now abandoned which is a continuation of Ser. No. US 1991-783518, filed on 28 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-678129, filed on 1 Apr 1991, now abandoned which is a continuation-in-part of Ser. No. US 1989-415283, filed on 30 Aug 1989, now abandoned

PRAI SU 1987-4352833 19871230

DT Utility

FS Granted

EXNAM Primary Examiner: Feisee, Lila; Assistant Examiner: Ungar, Susan

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 8 Drawing Page(s)

LN.CNT 8309

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods for normalizing the numbers of lymphocytes in animals by administering the dipeptide L-Glu-L-Trp.

L6 ANSWER 64 OF 94 USPATFULL

AN 1998:6916 USPATFULL

TI Photoactivatable chemiluminescent matrices  
IN Pease, John S., Los Altos, CA, United States  
Kirakossian, Hrair, San Jose, CA, United States  
Wagner, Daniel B., Sunnyvale, CA, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Syntex (U.S.A.) Inc., San Jose, CA, United States (U.S. corporation)  
PI US 5709994 19980120  
AI US 1995-470862 19950606 (8)

RLI Continuation of Ser. No. US 1992-923069, filed on 31 Jul 1992

DT Utility

FS Granted

EXNAM Primary Examiner: Myers, Carla J.

LREP Finnegan, Henderson, Farabow, Garrett & Dunner

CLMN Number of Claims: 74

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3237

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for labeling a material are disclosed. The methods comprise combining with the material (a) a photosensitizer capable upon irradiation of generating singlet oxygen and (b) a chemiluminescent compound capable of being activated by singlet oxygen wherein the photosensitizer and the chemiluminescent compound are incorporated in a particulate matrix or a non-particulate solid matrix. The particulate matrix can be solid or fluid. The methods allow for generating delayed luminescence, which can be realized upon irradiation of the matrix. The methods have application to the determination of an analyte in a medium suspected of containing the analyte. One method comprises subjecting a medium suspected of containing an analyte to conditions under which a complex of specific binding pair (sbp) members is formed in relation to the presence of the analyte and determining whether the sbp member complex has formed by employing as a label a single composition having both chemiluminescent and photosensitizer properties. Upon activation of the photosensitizer property singlet oxygen is generated and activates the chemiluminescent property. Compositions and kits are also disclosed.

L6 ANSWER 65 OF 94 USPATFULL

AN 97:104614 USPATFULL

TI Methods and compositions for detecting and treating mycobacterial infections using an INHA gene

IN Jacobs, Jr., William R., City Island, NY, United States

Collins, Desmond Michael, Wellington, New Zealand

Banerjee, Asesh, Bronx, NY, United States

de Lisle, Geoffrey William, Upper Hutt, New Zealand

Wilson, Theresa Mary, Wainuiomata, New Zealand

PA AgResearch, New Zealand Pastoral Agriculture Research Institute Ltd., Wellington, New Zealand (non-U.S. corporation)

PI US 5686590 19971111

AI US 1994-241766 19940512 (8)

RLI Continuation-in-part of Ser. No. US 1993-62409, filed on 14 May 1993, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Ziska, Suzanne E.

LREP Monroy, Gladys H.

CLMN Number of Claims: 13

ECL Exemplary Claim: 1

DRWN 28 Drawing Figure(s); 28 Drawing Page(s)

LN.CNT 1570

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The embodiments of the invention are based upon the identification and characterization of genes that determine mycobacterial resistance to the antibiotic isoniazid (INH) and its analogs. These genes, termed inhA, encode a polypeptide, InhA, that is the target of action of mycobacteria for isoniazid. The sequences of wild-type INH-sensitive as well as allelic or \*\*\*mutant\*\*\* INH-resistant inhA genes and their operons are provided. Also provided are isolated InhA polypeptides of both the INH-resistant and INH-sensitive types.

L6 ANSWER 66 OF 94 USPATFULL

AN 97:104285 USPATFULL

TI Method of stabilizing enzyme conjugates

IN Skold, Carl N., Mountain View, CA, United States

Henson, Margaret, Mountain View, CA, United States

Houts, Thomas Michael, Mountain View, CA, United States

Gibbons, Ian, Portola Valley, CA, United States  
PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S.  
corporation)  
PI US 5686253 19971111  
AI US 1995-450744 19950525 (8)  
RLI Continuation of Ser. No. US 1990-616115, filed on 20 Nov 1990, now  
abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Saunders, David  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 44  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1905

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for stabilizing a conjugate of an enzyme and a member of a specific binding pair (enzyme conjugate). The method comprises the step of combining the enzyme conjugate with an effective amount of an antibody for the enzyme where the antibody does not substantially inhibit the activity of the enzyme. The invention has application to assays for the determination of an analyte wherein enzyme conjugates are employed. The improvement comprises employing as a reagent in the assay an immune complex of an enzyme conjugate and an antibody for the enzyme where the antibody does not substantially inhibit the activity of the enzyme. Compositions comprising such an immune complex and kits comprising such an immune complex in packaged combination with other assay reagents are also disclosed.

L6 ANSWER 67 OF 94 USPATFULL

AN 97:101637 USPATFULL

TI Methods for producing a single stranded polydeoxynucleotide having two different defined sequences and kits

IN Laney, Maureen, Palo Alto, CA, United States

Chen, Yan, Palo Alto, CA, United States

Ullman, Edwin F., Atherton, CA, United States

Hahnenberger, Karen M., Cupertino, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S.  
corporation)

PI US 5683879 19971104

AI US 1995-475236 19950607 (8)

RLI Continuation of Ser. No. US 1993-140349, filed on 20 Oct 1993 which is a continuation-in-part of Ser. No. US 1992-923079, filed on 31 Jul 1992, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Campbell, Eggerton A.

LREP Leitereg, Theodore J.

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN 17 Drawing Figure(s); 16 Drawing Page(s)

LN.CNT 2461

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for extending a primer to produce a single stranded polydeoxynucleotide that has two or more defined sequences. A combination is provided which comprises a template polynucleotide, a blocker polynucleotide, a primer polynucleotide and a polynucleotide Q. The template polynucleotide has three sequences T1, T2 and T3 wherein T1 is non-contiguous and 3' of T3 and wherein the 5' end of T3 is 5' of the 5' end of T2. The primer polynucleotide has a second defined sequence at its 3' end that is hybridizable with T1. The blocker polynucleotide has

sequence B1 that is hybridizable with T3. Polynucleotide Q has sequences S1 and S2 wherein S1 is 3' of S2 and homologous with T2 and S2 is complementary to a first defined sequence that is to be introduced at the 3' end of the polynucleotide primer, when it is extended during the method of the invention. Polynucleotide Q is either attached to the 5' end of the blocker polynucleotide or present as a separate reagent. The primer is extended along the template polynucleotide and along at least a portion of sequence T2 and thereafter along the polynucleotide Q to give a single stranded polynucleotide having two or more defined sequences.

L6 ANSWER 68 OF 94 USPATFULL

AN 97:96713 USPATFULL

TI Method for introducing defined sequences at the 3'end of polynucleotides

IN Laney, Maureen, Palo Alto, CA, United States

Chen, Yan, Palo Alto, CA, United States

Ullman, Edwin F., Atherton, CA, United States

Hahnenberger, Karen M., Cupertino, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PI US 5679512 19971021

AI US 1993-140349 19931020(8)

RLI Continuation-in-part of Ser. No. US 1992-923079, filed on 31 Jul 1992, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Campbell, Eggerton

LREP Leitereg, Theodore J.

CLMN Number of Claims: 39

ECL Exemplary Claim: 1

DRWN 17 Drawing Figure(s); 16 Drawing Page(s)

LN.CNT 2595

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for extending a primer to produce a single stranded polydeoxyribonucleotide that has two or more defined sequences. A combination is provided which comprises a template polynucleotide, a blocker polynucleotide, a primer polynucleotide and a polynucleotide Q. The template polynucleotide has three sequences T1, T2 and T3 wherein T1 is non-contiguous and 3' of T3 and wherein the 5' end of T3 is 5' of the 5' end of T2. The primer polynucleotide has a second defined sequence at its 3' end that is hybridizable with T1. The blocker polynucleotide has sequence B1 that is hybridizable with T3. Polynucleotide Q has sequences S1 and S2 wherein S1 is 3' of S2 and homologous with T2 and S2 is complementary to a first defined sequence that is to be introduced at the 3' end of the polynucleotide primer, when it is extended during the method of the invention. Polynucleotide Q is either attached to the 5' end of the blocker polynucleotide or present as a separate reagent. The primer is extended along the template polynucleotide and along at least a portion of sequence T2 and thereafter along the polynucleotide Q to give a single stranded polynucleotide having two or more defined sequences.

L6 ANSWER 69 OF 94 USPATFULL

AN 97:88865 USPATFULL

TI Methods of use for and kits containing chemiluminescent compounds

IN Singh, Sharat, San Jose, CA, United States

Singh, Rajendra, Mountain View, CA, United States

Meneghini, Frank, Keene, NH, United States

Ullman, Edwin F., Atherton, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PI US 5672478 19970930  
AI US 1996-661846 19960611 (8)  
RLI Division of Ser. No. US 1995-373678, filed on 17 Jan 1995, now patented,  
Pat. No. US 5545834 which is a continuation of Ser. No. US 1992-916453,  
filed on 20 Jul 1992, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Marschel, Ardin H.; Assistant Examiner: Riley, Jezia  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 36  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 1892

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are disclosed for determining an analyte in a medium suspected of containing the analyte. One method comprises providing (1) combining a medium suspected of containing the analyte and a novel chemiluminescent compound, (2) combining a means for chemically activating the chemiluminescent compound; and (3) detecting the amount of luminescence generated by the chemiluminescent compound. The amount of luminescence generated is related to the amount of analyte in the medium. The chemiluminescent compound can be chemically activated by hydrogen peroxide. Compositions and kits are also disclosed.

L6 ANSWER 70 OF 94 USPATFULL

AN 97:49519 USPATFULL

TI Heterogeneous assay using a pendulous drop

IN Meltzer, Robert J., Kirkland, WA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S.  
corporation)

PI US 5637467 19970610

AI US 1995-412636 19950329 (8)

RLI Continuation of Ser. No. US 1992-960032, filed on 13 Oct 1992, now  
abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: King, Theresa

LREP Precivale, Shelley G., Kaku, Janet K., Clarke, Pauline Ann

CLMN Number of Claims: 55

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 1529

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB As method of determining an analyte is described, where a medium suspected of containing an analyte is drawn into a capillary tube by capillary action, such that if the analyte is present, it becomes immobilized in the tube. This medium is expelled from the tube and, optionally, one or more additional reagents are similarly drawn up and expelled. When the last fluid is expelled from the tube, a pendulous drop is caused to form at the opening of the capillary tube and is examined for the presence or intensity of the signal, which is related to the presence or amount of analyte in the medium.

L6 ANSWER 71 OF 94 USPATFULL

AN 97:44925 USPATFULL

TI DNA polymerase III .beta.-subunit from mycobacteriophage DS6A

IN Pearson, Robert E., Durham, NC, United States

Dickson, Julie A., Raleigh, NC, United States

Hamilton, Paul T., Cary, NC, United States

Little, Michael C., Raleigh, NC, United States

Beyer, Jr., Wayne F., Bahama, NC, United States

PA Becton, Dickinson and Company, Franklin Lakes, NJ, United States (U.S.

corporation)

PI US 5633159 19970527

AI US 1995-402068 19950310 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Hendricks, Keith D.

LREP Fugit, Donna R.

CLMN Number of Claims: 2

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1114

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Mycobacteriophage DS6A has been characterized and found to specifically infect all species of the TB complex, without any detectable infection of mycobacteria species other than those of the TB complex. DNA sequence analysis revealed several potential open reading frames, including one encoding a protein analogous to gp37 of mycobacteriophage L5 and a second encoding a protein with significant homology to the *S. coelicolor* DNA polymerase .beta. subunit. Based on the DNA sequence analysis, cloning sites can be identified for insertion of reporter genes, making DS6A useful as a reporter phage for specific detection and identification of species of the TB complex.

L6 ANSWER 72 OF 94 USPATFULL

AN 97:29389 USPATFULL

TI Method of calibration with photoactivatable chemiluminescent matrices

IN Pease, John S., Los Altos, CA, United States

Kirakossian, Hrair, San Jose, CA, United States

Wagner, Daniel B., Sunnyvale, CA, United States

Ullman, Edwin F., Atherton, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S.  
corporation)

PI US 5618732 19970408

AI US 1995-434617 19950504 (8)

RLI Division of Ser. No. US 1992-923069, filed on 31 Jul 1992

DT Utility

FS Granted

EXNAM Primary Examiner: Snay, Jeffrey

LREP Leitereg, Theodore J.

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2936

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for labeling a material are disclosed. The methods comprise combining with the material (a) a photosensitizer capable upon irradiation of generating singlet oxygen and (b) a chemiluminescent compound capable of being activated by singlet oxygen wherein the photosensitizer and the chemiluminescent compound are incorporated in a particulate matrix or a non-particulate solid matrix. The particulate matrix can be solid or fluid. The methods allow for generating delayed luminescence, which can be realized upon irradiation of the matrix. The methods have application to the determination of an analyte in a medium suspected of containing the analyte. One method comprises subjecting a medium suspected of containing an analyte to conditions under which a complex of specific binding pair (sbp) members is formed in relation to the presence of the analyte and determining whether the sbp member complex has formed by employing as a label a single composition having both chemiluminescent and photosensitizer properties. Upon activation of the photosensitizer property singlet oxygen is generated and activates

the chemiluminescent property. Compositions and kits are also disclosed.

L6 ANSWER 73 OF 94 USPATFULL

AN 97:22643 USPATFULL

TI Method for producing a polynucleotide for use in single primer amplification

IN Western, Linda M., San Mateo, CA, United States

Hahnenberger, Karen M., Cupertino, CA, United States

Rose, Samuel, Mountain View, CA, United States

Becker, Martin, Palo Alto, CA, United States

Ullman, Edwin F., Atherton, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PI US 5612199 19970318

AI US 1994-221662 19940401 (8)

RLI Continuation of Ser. No. US 1991-776538, filed on 11 Oct 1991, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.

LREP Leitereg, Theodore J.

CLMN Number of Claims: 46

ECL Exemplary Claim: 2

DRWN 8 Drawing Figure(s); 5 Drawing Page(s)

LN.CNT 1936

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for extending an extender probe to produce a single stranded polydeoxynucleotide that is free of unreacted extender probe and has two segments that are non-contiguous and complementary with each other. The method comprises the steps of (1) providing in combination (a) a polynucleotide having two non-contiguous, non-complementary nucleotide sequences S1 and S2 wherein S2 is 5' of S1 and is at least ten deoxynucleotides long, (b) an extender probe comprised of two deoxynucleotide sequences, wherein the sequence at the 3'-end of the extender probe (EP1) is hybridizable with S1 and the other of the deoxynucleotide sequences (EP2) is substantially identical to S2 and (c) means for modifying the 3'-end of extender probe that does not hybridize with the polynucleotide and (2) extending the extender probe along the polynucleotide wherein extender probe not hybridized to the polynucleotide becomes modified at its 3'-end.

L6 ANSWER 74 OF 94 USPATFULL

AN 97:22627 USPATFULL

TI Mycobacteriophage specific for the mycobacterium tuberculosis complex

IN Pearson, Robert E., Durham, NC, United States

Dickson, Julie A., Raleigh, NC, United States

Hamilton, Paul T., Cary, NC, United States

Little, Michael C., Raleigh, NC, United States

Beyer, Jr., Wayne F., Bahama, NC, United States

PA Becton, Dickinson and Company, Franklin Lakes, NJ, United States (U.S. corporation)

PI US 5612182 19970318

AI US 1995-402066 19950310 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Shaver, Jennifer

LREP Fugit, Donna R.

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1138

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Mycobacteriophage DS6A has been characterized and found to specifically infect all species of the TB complex, without any detectable infection of mycobacteria species other than those of the TB complex. DNA sequence analysis revealed several potential open reading frames, including one encoding a protein analogous to gp37 of mycobacteriophage L5 and a second encoding a protein with significant homology to the S. coelicolor DNA polymerase .beta. subunit. Based on the DNA sequence analysis, cloning sites can be identified for insertion of reporter genes, making DS6A useful as a reporter phage for specific detection and identification of species of the TB complex.

L6 ANSWER 75 OF 94 USPATFULL

AN 97:5872 USPATFULL

TI Method for producing a polynucleotide for use in single primer amplification

IN Rose, Samuel, Mountain View, CA, United States  
Western, Linda M., Mountain View, CA, United States  
Becker, Martin, Palo Alto, CA, United States  
Ullman, Edwin F., Atherton, CA, United States

PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)

PI US 5595891 19970121

AI US 1990-555323 19900719 (7)

DT Utility

FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.

LREP Leitereg, Theodore J.

CLMN Number of Claims: 49

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 1793

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for producing a single stranded polydeoxynucleotide having two segments that are non-contiguous and complementary with each other. The method comprises the steps of providing in combination (1) a polynucleotide having two non-contiguous, non-complementary nucleotide sequences S1 and S2 wherein S2 is 5' of S1 and is at least ten deoxynucleotides long and (2) an extender probe comprised of two deoxynucleotide sequences, wherein the sequence at the 3'-end of the extender probe is hybridizable with S1 and the other of the deoxynucleotide sequences is homologous to S2 and (b) extending the extender probe along the polynucleotide. The method can also comprise providing in the combination a polydeoxynucleotide primer capable of hybridizing at least at its 3'-end with a nucleotide sequence complementary to S2 under conditions where (1) the extended extender probe is rendered single stranded, (2) the polydeoxynucleotide primer hybridizes with and is extended along the extended extender probe to form a duplex comprising extended primer, (3) the extended primer is dissociated from the duplex, and (4) the primer hybridizes with and is extended along the extended primer to form a duplex comprising extended primer, and repeating steps (3) and (4). The method finds particular application in the detection of polynucleotide analytes.

L6 ANSWER 76 OF 94 USPATFULL

AN 96:113834 USPATFULL

TI Bacterial expression vectors containing DNA encoding secretion signals of lipoproteins

IN Stover, Charles K., Silver Spring, MD, United States

PA MedImmune, Inc., Gaithersburg, MD, United States (U.S. corporation)

PI US 5583038 19961210

AI US 1992-977630 19921117 (7)  
RLI Continuation-in-part of Ser. No. US 1991-780261, filed on 21 Oct 1991,  
now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Fleisher, Mindy; Assistant Examiner: Carter, Philip W.

LREP Olstein, Elliot M.

CLMN Number of Claims: 31

ECL Exemplary Claim: 1

DRWN 60 Drawing Figure(s); 64 Drawing Page(s)

LN.CNT 2112

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An expression vector for expressing a protein or polypeptide in a bacterium, which comprises a first DNA sequence encoding at least a secretion signal of a lipoprotein, and a second DNA sequence encoding a protein or fragment thereof, or polypeptide or peptide heterologous to the bacterium which expresses the protein or fragment thereof, or polypeptide or peptide. The bacterium expresses a fusion protein a lipoprotein or lipoprotein segment and the protein or fragment thereof, or polypeptide or peptide heterologous to the bacterium which expresses the protein or fragment thereof, or polypeptide or peptide. Such expression vectors increase the immunogenicity of the protein or fragment thereof, or polypeptide or peptide by enabling the protein or fragment thereof, or polypeptide or peptide to be expressed on the surface of the bacterium. Bacteria which may be transformed with the expression vector include mycobacteria such as BCG. The expression vectors of the present invention may be employed in the formation of live bacterial \*\*\*vaccines\*\*\* against Lyme disease wherein the bacteria express a surface protein of *Borrelia burgdorferi*, the causative agent of Lyme disease.

L6 ANSWER 77 OF 94 USPATFULL

AN 96:113771 USPATFULL

TI Mycobacteriophage specific for the mycobacterium tuberculosis complex

IN Pearson, Robert E., Durham, NC, United States

Dickson, Julie A., Raleigh, NC, United States

Hamilton, Paul T., Cary, NC, United States

Little, Michael C., Raleigh, NC, United States

Beyer, Jr., Wayne F., Bahama, NC, United States

PA Becton, Dickinson and Company, Franklin Lakes, NJ, United States (U.S. corporation)

PI US 5582969 19961210

AI US 1995-508004 19950727 (8)

RLI Division of Ser. No. US 1995-402282, filed on 10 Mar 1995, now patented, Pat. No. US 5476768, issued on 19 Dec 1995

DT Utility

FS Granted

EXNAM Primary Examiner: Elliott, George C.; Assistant Examiner: Brusca, John S.

LREP Fugit, Donna R.

CLMN Number of Claims: 1

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1115

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Mycobacteriophage DS6A has been characterized and found to specifically infect all species of the TB complex, without any detectable infection of mycobacteria species other than those of the TB complex. DNA sequence analysis revealed several potential open reading frames, including one encoding a protein analogous to gp37 of mycobacteriophage LS and a second encoding a protein with significant homology to the *S. coelicolor*

DNA polymerase .beta. subunit. Based on the DNA sequence analysis, cloning sites can be identified for insertion of reporter genes, making DS6A useful as a reporter phage for specific detection and identification of species of the TB complex.

L6 ANSWER 78 OF 94 USPATFULL  
AN 96:73076 USPATFULL  
TI Chemiluminescent compounds and methods of use  
IN Singh, Sharat, San Jose, CA, United States  
Singh, Rajendra, Mountain View, CA, United States  
Meneghini, Frank, Keene, NH, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S.  
corporation)  
PI US 5545834 19960813  
AI US 1995-373678 19950117 (8)  
RLI Continuation of Ser. No. US 1992-916453, filed on 20 Jul 1992, now  
abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Datlow, Philip I.  
LREP Precivale, Shelley G., Leitereg, Theodore J.  
CLMN Number of Claims: 11  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 1932

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are disclosed for determining an analyte in a medium suspected of containing the analyte. One method comprises providing (1) combining a medium suspected of containing the analyte and a novel chemiluminescent compound, (2) combining a means for chemically activating the chemiluminescent compound; and (3) detecting the amount of luminescence generated by the chemiluminescent compound. The amount of luminescence generated is related to the amount of analyte in the medium. The chemiluminescent compound can be chemically activated by hydrogen peroxide. Compositions and kits are also disclosed. The chemiluminescent compound is a spiro-acridan and has ##STR1## where X and Y are independently O, S, Se or NH; and Z is a chain, 1-5 atoms in length; 0 to 8 hydrogens of the compound alone or taken together, may be replaced an alkyl, alkylidene, aryl, aralkyl, or an alkyl, aryl or aralkyl substituted with one or more radicals of functional groups; 1 to 4 of the aromatic carbon atoms may be replaced by nitrogen atoms; and 0 to 1 hydrogens may be replaced by a specific binding pair member or fluorescent group.

L6 ANSWER 79 OF 94 USPATFULL  
AN 96:41081 USPATFULL  
TI Method for detection of specific nucleic acid sequences  
IN Ullman, Edwin F., Atherton, CA, United States  
Goodman, Thomas C., Mountain View, CA, United States  
Stull, Paul D., Mountain View, CA, United States  
PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)  
PI US 5516641 19960514  
AI US 1995-401660 19950310 (8)  
RLI Continuation of Ser. No. US 1994-200373, filed on 18 Feb 1994 which is a continuation of Ser. No. US 1992-993156, filed on 18 Dec 1992 which is a continuation of Ser. No. US 1988-236967, filed on 25 Aug 1988, now patented, Pat. No. US 5185243  
DT Utility  
FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.

LREP Leitereg, Theodore J., Kaku, Janet K., Bosse, Mark L.

CLMN Number of Claims: 2

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1508

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A kit is disclosed for a method for detecting the presence of a target polynucleotide sequence. The kit comprises a first polynucleotide sequence and a second polynucleotide sequence complementary to non-contiguous portions of a target polynucleotide sequence, which first and second sequences are covalently attached when they are hybridized to the target sequence. The presence of the covalently attached first and second sequences is related to the presence of the target polynucleotide sequence. The invention may be applied to target polynucleotide sequences in DNA or RNA. Specific target polynucleotide sequences of interest will frequently be characteristic of particular microorganisms, viruses, viroids, or genetic characteristics, including genetic abnormalities.

L6 ANSWER 80 OF 94 USPATFULL

AN 96:31728 USPATFULL

TI Nucleic acid amplification using single primer

IN Rose, Samuel, 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

Goodman, Thomas C., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

Western, Linda M., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

Becker, Martin, 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

Ullman, Edwin F., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303

PI US 5508178 19960416

AI US 1994-194140 19940209 (8)

RLI Continuation of Ser. No. US 1992-892412, filed on 1 Jun 1992, now abandoned which is a continuation of Ser. No. US 1989-299282, filed on 19 Jan 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Marschel, Ardin H.

LREP Leitereg, Theodore J.

CLMN Number of Claims: 25

ECL Exemplary Claim: 1

DRWN 6 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 1860

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for determining the presence of a polynucleotide analyte in a sample suspected of containing the analyte. The method comprises (a) forming as a result of the presence of an analyte a single stranded polynucleotide comprising a target polynucleotide binding sequence flanked by first and second polynucleotide sequences that differ from the sequence of the analyte or a sequence complementary to the analyte sequence, (b) forming multiple copies of the single stranded polynucleotide, and (c) detecting the single stranded polynucleotide. Also disclosed is a method of producing at least one copy of a single stranded polynucleotide. The method comprises (a) forming in the presence of nucleoside triphosphates and template dependent polynucleotide polymerase an extension of a polynucleotide primer at least the 3'-end of which has at least a 10 base sequence hybridizable with a second sequence flanking the 3'-end of the single stranded polynucleotide, the second sequence being partially or fully

complementary with at least a 10 base first sequence flanking the 5' end of the single stranded polynucleotide, (b) dissociating the extended polynucleotide primer and the single stranded polynucleotide, (c) repeating step a and (d) dissociating the extended polynucleotide primer and the copy of the single stranded polynucleotide.

L6 ANSWER 81 OF 94 USPATFULL

AN 96:27116 USPATFULL

TI Recombinant mycobacterial \*\*\*vaccine\*\*\*

IN Bloom, Barry R., Hastings on Hudson, NY, United States

Davis, Ronald W., Palo Alto, CA, United States

Jacobs, Jr., William R., Bronx, NY, United States

Young, Richard A., Winchester, MA, United States

Husson, Robert N., Takoma Park, MD, United States

PA Albert Einstein College of Medicine of Yeshiva University, Bronx, NY, United States (U.S. corporation)  
The Board of Trustees of the Leland Stanford, Jr. University, Stanford, CA, United States (U.S. corporation)  
Whitehead Institute for Biomedical Research, Cambridge, MA, United States (U.S. corporation)

PI US 5504005 19960402

AI US 1989-361944 19890605 (7)

RLI Continuation-in-part of Ser. No. US 1988-223089, filed on 22 Jul 1988, now abandoned And Ser. No. US 1988-216390, filed on 7 Jul 1988, now abandoned , each which is a continuation-in-part of Ser. No. US 1988-163546, filed on 3 Mar 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-20451, filed on 2 Mar 1987, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Stone, Jacqueline; Assistant Examiner: LeGuyader, J.

LREP Hamilton, Brook, Smith & Reynolds

CLMN Number of Claims: 29

ECL Exemplary Claim: 1

DRWN 23 Drawing Figure(s); 17 Drawing Page(s)

LN.CNT 2391

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Recombinant mycobacterial \*\*\*vaccine\*\*\* vehicles capable of expressing DNA of interest which encodes at least one protein antigen for at least one pathogen against which an immune response is desired and which can be incorporated into the mycobacteria or stably integrated into the mycobacterial genome. The \*\*\*vaccine\*\*\* vehicles are useful for administration to mammalian hosts for purposes of immunization. A recombinant vector which replicates in *E. coli* but not in mycobacteria is also disclosed. The recombinant vector includes 1) a mycobacterial gene or portions thereof, necessary for recombination with homologous sequences in the genome of mycobacteria transformed with the recombinant plasmid; 2) all or a portion of a gene which encodes a polypeptide or protein whose expression is desired in mycobacteria transformed with the recombinant plasmid; 3) DNA sequences necessary for replication and selection in *E. coli*; and 4) DNA sequences necessary for selection in mycobacteria (e.g., drug resistance). The present invention also relates to two types of recombinant vectors useful in introducing DNA of interest into mycobacteria, where it is expressed. One type of vector is a recombinant phasmid capable of replicating as a plasmid in *E. coli* and of lysogenizing a mycobacterial host. The other type of vector is a recombinant plasmid which can be introduced into mycobacteria, where it is stably maintained extrachromosomally.

L6 ANSWER 82 OF 94 USPATFULL

AN 95:112453 USPATFULL

TI Mycobacteriophage DSGA specific for the mycobacterium tuberculosis complex  
IN Pearson, Robert E., Durham, NC, United States  
Dickson, Julie A., Raleigh, NC, United States  
Hamilton, Paul T., Cary, NC, United States  
Little, Michael C., Raleigh, NC, United States  
Beyer, Jr., Wayne F., Bahama, NC, United States  
PA Becton, Dickinson and Company, Franklin Lakes, NJ, United States (U.S. corporation)  
PI US 5476768 19951219  
AI US 1995-402282 19950310 (8)  
DT Utility  
FS Granted

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Fredman, Jeffrey N.

LREP Fugit, Donna R.

CLMN Number of Claims: 15

ECL Exemplary Claim: 15

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1164

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Mycobacteriophage DS6A has been characterized and found to specifically infect all species of the TB complex, without any detectable infection of mycobacteria species other than those of the TB complex. DNA sequence analysis revealed several potential open reading frames, including one encoding a protein analogous to gp37 of mycobacteriophage L5 and a second encoding a protein with significant homology to the S. coelicolor DNA polymerase .beta. subunit. Based on the DNA sequence analysis, cloning sites can be identified for insertion of reporter genes, making DS6A useful as a reporter phage for specific detection and identification of species of the TB complex.

L6 ANSWER 83 OF 94 USPATFULL

AN 95:80216 USPATFULL

TI Diagnostic assay for bacteria based on fragment amplification using insertion sequence location

IN Bricker, Betsy J., Ames, IA, United States

Halling, Shirley M., Ames, IA, United States

PA The United States of America as represented by the Secretary of Agriculture, Washington, DC, United States (U.S. government)

PI US 5447844 19950905

AI US 1992-998636 19921230 (7)

RLI Continuation of Ser. No. US 1991-670602, filed on 14 Mar 1991, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.

LREP Silverstein, M. Howard, Ribando, Curtis P., Fado, John D.

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 764

AB A diagnostic assay is provided for identifying closely-related strains or species of bacteria which possess common insertion sequence which is present in different positions within the genomic or plasmidic DNA for the different strains or species. A fragment of DNA defined by a site within the insertion sequence and another site outside the insertion sequence is amplified, such as by polymerase chain reaction. By appropriately preselecting a different size fragment to be amplified in each of the candidate organisms, those organisms which are actually present in a biological sample can be positively identified by size of

the amplified fragments.

L6 ANSWER 84 OF 94 USPATFULL

AN 95:71247 USPATFULL

TI Method for producing a polynucleotide having an intramolecularly base-paired structure

IN Rose, Samuel, Mountain View, CA, United States

Western, Linda M., Mountain View, CA, United States

PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)

PI US 5439793 19950808

AI US 1990-555968 19900719 (7)

DT Utility

FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.

LREP Leitereg, Theodore J.

CLMN Number of Claims: 49

ECL Exemplary Claim: 1

DRWN 4 Drawing Figure(s); 5 Drawing Page(s)

LN.CNT 2156

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for forming a single stranded polynucleotide having two segments that are non-contiguous and hybridizable with each other. The method comprises the step of providing in combination (1) a first polynucleotide sequence having a hydroxyl at its 3'-end, (2) a second polynucleotide sequence having a hydroxyl or phosphate group at its 5'-end, and (3) a ligase, wherein at least ten consecutive bases of one of the sequences can hybridize to the other of the sequences to form a duplex. The duplex is comprised of a non-hybridized single stranded portion of one of the polynucleotide sequences containing one of the ends and at least five bases. The combination is provided under conditions for forming the duplex and ligating the ends within the duplex. The method finds particular application in the detection of polynucleotide analytes.

L6 ANSWER 85 OF 94 USPATFULL

AN 95:22820 USPATFULL

TI Amplification method for polynucleotide detection assays

IN Goodman, Thomas C., Mountain View, CA, United States

Becker, Martin, Palo Alto, CA, United States

Ullman, Edwin F., Atherton, CA, United States

Rose, Samuel, Mountain View, CA, United States

PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)

PI US 5397698 19950314

AI US 1993-146297 19931102 (8)

RLI Division of Ser. No. US 1990-614180, filed on 13 Nov 1990, now patented, Pat. No. US 5273879 which is a division of Ser. No. US 1987-76807, filed on 23 Jul 1987, now patented, Pat. No. US 4994368, issued on 19 Feb 1991

DT Utility

FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.

LREP Leitereg, Theodore J., Peries, Rohan

CLMN Number of Claims: 42

ECL Exemplary Claim: 1

DRWN 6 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 1810

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for producing multiple copies of a primary polynucleotide sequence located at the 3' terminus of a polynucleotide. The method comprises (a) forming in the presence of nucleoside

triphosphates and template-dependent polynucleotide polymerase an extension of a primary polynucleotide sequence hybridized with a

template sequence of a single stranded pattern polynucleotide comprising two or more template sequences each containing one or more site specific cleavage sequences, (b) cleaving into fragments said extension at cleavable polynucleotide sequences in the presence of means for specifically cleaving said cleavable polynucleotide sequences when said extension is hybridized with said site specific cleavage sequences, (c) dissociating said fragments, (d) hybridizing said fragments with single stranded pattern polynucleotide, and repeating steps (a)-(d). Steps (a)-(d) may be conducted simultaneously or wholly or partially sequentially. The method may be applied in the detection of a polynucleotide analyte in a sample suspected of containing such analyte to facilitate such detection. Also disclosed are compositions for conducting the method of the invention.

L6 ANSWER 86 OF 94 USPATFULL

AN 94:73204 USPATFULL

TI Assay method utilizing photoactivated chemiluminescent label

IN Ullman, Edwin F., Atherton, CA, United States

Kirakossian, Hrair, San Jose, CA, United States

Pease, John S., Los Altos, CA, United States

Daniloff, Yuri, Mountain View, CA, United States

Wagner, Daniel B., Sunnyvale, CA, United States

PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)

PI US 5340716 19940823

AI US 1991-718490 19910620 (7)

DT Utility

FS Granted

EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Schmickel, David

LREP Leitereg, Theodore J.

CLMN Number of Claims: 86

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2698

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are disclosed for determining an analyte in a medium suspected of containing the analyte. One method comprises providing (1) a medium suspected of containing the analyte, (2) a label reagent comprising a first specific binding pair (sbp) member associated with a photochemically activatable chemiluminescent compound wherein the first sbp member is capable of binding to the analyte or to a second sbp member to form a complex related to the presence of the analyte. The method further comprises photochemically activating the chemiluminescent compound. The amount of luminescence generated by the chemiluminescent compound is detected. The amount thereof is related to the amount of analyte in the medium. Compositions and kits are also disclosed.

L6 ANSWER 87 OF 94 USPATFULL

AN 93:108981 USPATFULL

TI Amplification method for polynucleotide assays

IN Goodman, Thomas C., Mountain View, CA, United States

Becker, Martin, Palo Alto, CA, United States

Ullman, Edwin F., Atherton, CA, United States

Rose, Samuel, Mountain View, CA, United States

PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)

PI US 5273879 19931228

AI US 1990-614180 19901113 (7)

RLI Division of Ser. No. US 1987-76807, filed on 23 Jul 1987, now patented,  
Pat. No. US 4994368

DT Utility

FS Granted

EXNAM Primary Examiner: Zitomer, Stephanie W.

LREP Leitereg, Theodore J.

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN 6 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 1539

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A Kit is disclosed for a method for producing multiple copies of a primary polynucleotide sequence located at the 3' terminus of a polynucleotide. The method comprises (a) forming in the presence of nucleoside triphosphates and template-dependent polynucleotide polymerase an extension of a primary polynucleotide sequence hybridized with a template sequence of a single stranded pattern polynucleotide comprising two or more template sequences each containing one or more site specific cleavage sequences, (b) cleaving into fragments said extension at cleavable polynucleotide sequences in the presence of means for specifically cleaving said cleavable polynucleotide sequences when said extension is hybridized with said site specific cleavage sequences, (c) dissociating said fragments, (d) hybridizing said fragments with single stranded pattern polynucleotide, and repeating steps (a)-(d). Steps (a)-(d) may be conducted simultaneously or wholly or partially sequentially. The method may be applied in the detection of a polynucleotide analyte in a sample suspected of containing such analyte to facilitate such detection. Also disclosed are compositions for conducting the method of the invention.

L6 ANSWER 88 OF 94 USPATFULL

AN 93:54639 USPATFULL

TI Diagnostics for mycobacteria in public health, medical, and veterinary practice

IN McFadden, John-Jo, London, England  
Hermon-Taylor, John, London, England

PA Bioscience International, Inc., Boston, MA, United States (U.S. corporation)

PI US 5225324 19930706

AI US 1992-869886 19920414 (7)

RLI Continuation of Ser. No. US 1988-185113, filed on 22 Apr 1988, now abandoned

PRAI GB 1987-9803 19870424

DT Utility

FS Granted

EXNAM Primary Examiner: Moskowitz, Margaret; Assistant Examiner: Zitomer, Stephanie W.

LREP Reed & Robins

CLMN Number of Claims: 26

ECL Exemplary Claim: 2

DRWN 7 Drawing Figure(s); 9 Drawing Page(s)

LN.CNT 789

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a family of DNA insertion sequences (ISMY) of mycobacterial origin and other DNA probes which may be used as probes in assay methods for the identification of mycobacteria and the differentiation between closely related mycobacterial strains and species. In one method the probes are used to distinguish pathogenic M. \*\*\*paratuberculosis\*\*\* from M. avium, which finds an application in the diagnosis of Crohn's disease in humans and Johne's disease in animals. The use of ISMY, and of proteins and peptides encoded by ISMY, in \*\*\*vaccines\*\*\*, pharmaceutical preparations and diagnostic test kits is also disclosed.

L6 ANSWER 89 OF 94 USPATFULL

AN 93:10428 USPATFULL

TI Method for detection of specific nucleic acid sequences  
IN Ullman, Edwin F., Atherton, CA, United States  
Goodman, Thomas C., Mountain View, CA, United States  
Stull, Paul D., Mountain View, CA, United States  
PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)  
PI US 5185243 19930209  
AI US 1988-236967 19880825 (7)  
DT Utility  
FS Granted

EXNAM Primary Examiner: Yarbrough, Amelia Burgess; Assistant Examiner:  
Zitomer, Stephanie W.

LREP Leitereg, Theodore J., Bosse, Mark L.

CLMN Number of Claims: 59

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1690

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for detecting the presence of a target nucleotide sequence in a polynucleotide. The method comprises hybridizing a first nucleotide sequence and a second nucleotide sequence to non-contiguous portions of a target nucleotide sequence, covalently attaching the first and second sequences when they are hybridized to the target sequence, and determining the presence of covalently attached first and second sequences. The presence of the covalently attached first and second sequences is related to the presence of the target nucleotide sequence. The invention may be applied to target nucleotide sequences in DNA or RNA. Specific target nucleotide sequences of interest will frequently be characteristic of particular microorganisms, viruses, viroids, or genetic characteristics, including genetic abnormalities.

L6 ANSWER 90 OF 94 USPATFULL

AN 91:15075 USPATFULL

TI Amplification method for polynucleotide assays

IN Goodman, Thomas C., Mountain View, CA, United States

Becker, Martin, Palo Alto, CA, United States

Ullman, Edwin F., Atherton, CA, United States

Rose, Samuel, Mountain View, CA, United States

PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)

PI US 4994368 19910219

AI US 1987-76807 19870723 (7)

DT Utility

FS Granted

EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Zitomer, Stephanie W.

LREP Leitereg, Theodore J.

CLMN Number of Claims: 68

ECL Exemplary Claim: 1

DRWN 6 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 1947

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for producing multiple copies of a primary polynucleotide sequence located at the 3' terminus of a polynucleotide. The method comprises (a) forming in the presence of nucleoside triphosphates and template-dependent polynucleotide polymerase an extension of a primary polynucleotide sequence hybridized with a template sequence of a single stranded pattern polynucleotide comprising two or more template sequences each containing one or more site specific cleavage sequences, (b) cleaving into fragments said extension at cleavable polynucleotide sequences in the presence of means for specifically cleaving said cleavable polynucleotide sequences when said extension is hybridized with said site specific cleavage sequences, (c)

dissociating said fragments, (d) hybridizing said fragments with single stranded pattern polynucleotide, and repeating steps (a)-(d). Steps (a)-(d) may be conducted simultaneously or wholly or partially sequentially. The method may be applied in the detection of a polynucleotide analyte in a sample suspected of containing such analyte to facilitate such detection. Also disclosed are compositions for conducting the method of the invention.

L6 ANSWER 91 OF 94 CAPLUS COPYRIGHT 2002 ACS

AN 1991:222816 CAPLUS

DN 114:222816

TI Expression system for actinomycetes and related organisms

IN Radford, Anthony John; Wood, Paul Richard

PA Commonwealth Scientific and Industrial Research Organization, Australia

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 9010701	A1	19900920	WO 1990-AU89	19900305
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W: AU, CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE

AU 9052626 A1 19901009 AU 1990-52626 19900305

AU 627011 B2 19920813

EP 486495 A1 19920527 EP 1990-904182 19900305

R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE

PRAI AU 1989-3099 19890308

WO 1990-AU89 19900305

AB An expression system for actinomycetes such as Mycobacterium comprises the promoter region of the gene MPB70, the origin of replication, and markers is prep'd. for gene expression in these organisms. The system has an application in the expression of \*\*\*mutant\*\*\* alleles of the gene MPB70 for use of the gene products in \*\*\*vaccines\*\*\* . The MPB70 gene was cloned from Mycobacterium bovis AN5. The DNA sequence, promoter region, and signal sequences were detd. Expression of the MPB70 gene in M. smegmatis was also demonstrated.

L6 ANSWER 92 OF 94 USPATFULL

AN 88:32582 USPATFULL

TI Lipopolysaccharide and process for preparation thereof

IN Kobatake, Hiroshi, Kyoto, Japan

Suekane, Takahiro, Ibaragi, Japan

Kumagai, Kazuhiro, Kyoto, Japan

Ohya, Osamu, Nishinomiya, Japan

PA Maruyama, Chisato, Tokyo, Japan (non-U.S. individual)

Zeria Shinyaku Kogyo Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)

PI US 4746511 19880524

AI US 1986-889957 19860728 (6)

RLI Continuation of Ser. No. US 1984-585418, filed on 2 Mar 1984, now abandoned

PRAI JP 1983-35621 19830304

DT Utility

FS Granted

EXNAM Primary Examiner: Wiseman, Thomas G.; Assistant Examiner: Peet, Richard C.

LREP Scrivener and Clarke

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 848

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A lipopolysaccharide characterized by a polysaccharide portion composed of D-arabinose and D-mannose in a 1:3/4 ration and 37 to 47% of a fatty acid portion having 14-19 carbon atoms bonded to the polysaccharide through an ester linkage. This lipopolysaccharide has physiological activities such as antitumor activity, immunizing activity, cell juvenescent activity, phagocyte activating activity, and infection preventing activity.

This lipopolysaccharide is prepared by culturing a Mycobacterium or a Propionibacterium and extracting the lipopolysaccharide from the culture with a non-ionic surface active agent and purifying the extract with a molecular sieve.

L6 ANSWER 93 OF 94 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

AN 83104142 EMBASE

DN 1983104142

TI [Diphtheria bacillus-like organisms related to leprosy bacilli].

A PROPOS DES GERMES DIPHTERIMORPHES LIES AUX BACILLES LEPREUX.

AU Mazet G.

CS France

SO Acta Leprologica, (1982) No. 89/- (43-48).

CODEN: ALEPA8

CY Switzerland

DT Journal

FS 051 Leprosy and other Mycobacterial Diseases

004 Microbiology

013 Dermatology and Venereology

LA French

SL English

AB It seems that through simple means of culture, one may obtain the

\*\*\*mutation\*\*\* or more exactly the regression of the mycobacteria (BK, BCG, etc.) into a germ difficult to classify in taxonomy, placed nearer to the mycobacteria than to the corynebacteria. Arising from a cessation of maturation of the cyanophil substance, this bacterium may be considered as 'Progenitor' ancestor (the right terms used by V. Livingston) of the various species of mycobacteria (BK, Hansen's bacillus, phleum bacillus, etc.). Some ones among the mycobacterioses of Penso (ex

\*\*\*paratuberculosis\*\*\* of Calmette) are perhaps only corynebacilloses for a part of their pathogenic and anatomo-pathologic. This bacterium, that we call C.c.x. 'unknown common Corynebacterium', can be an ubiquitous saprophyte or a dangerous pathogen by itself or thorough its phage. From the immunological point of view it seems interesting to make from this organism a \*\*\*vaccine\*\*\* at once antimycobacterial and anticancerous: the lytic action of our C.c.x. versus the acid-fast bacilli must not be forgotten. We already wonder whether the BCG therapy, which is so beneficial against leukemia and some cancers, is not actually an unknown corynetherapy. The fact that the \*\*\*mutation\*\*\* may happen 'in vivo' is not demonstrable since we obtained a culture of C.c.x. each time we have tested any pure tuberculous product, either human or animal (pus, pleural, ascitic, cerebrospinal fluids, etc.). The Corynebacterium would stick to the BK like its shadow. It must be added that the peculiar lytic action of C.c.x. versus the acid-fast bacilli is worth being kept in mind: it may be of a real interest from the point of view of general immunology.

L6 ANSWER 94 OF 94 USPATFULL

AN 80:56609 USPATFULL

TI Reagents and method employing channeling

IN Maggio, Edward T., Redwood City, CA, United States

Wife, Richard L., Sittingbourne, England  
Ullman, Edwin F., Atherton, CA, United States  
PA Syva Company, Palo Alto, CA, United States (U.S. corporation)  
PI US 4233402 19801111  
AI US 1978-893650 19780405 (5)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Warden, Robert J.  
LREP Rowland, Bertram I.  
CLMN Number of Claims: 44  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1842  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Method and compositions are provided for chemical analysis of an analyte which is a member of a specific binding pair of organic substances consisting of ligand and ligand receptor (antiligand). The method involves bringing together the following reagents with the analyte in an aqueous assay medium under mild conditions.

The first reagent is a conjugate of a member of the specific binding pair with a chemical entity which provides a means for chemically changing the concentration of a compound which acts as a signal mediator. The second reagent is the signal mediator precursor. The third reagent is a conjugate of a member of the specific binding pair with a component of a signal producing system of which system the signal mediator is a member.

The amount of signal which can be detected is affected by the local concentration of the signal mediator. By bringing the reagents together in the presence of analyte, where the signal mediator concentration changing means is brought together in a microenvironment with the conjugated signal producing system component, localized concentrations of the signal mediator can be created which differ from the gross concentration of the signal mediator in the assay medium. The degree to which the signal mediator concentration changing means is in close proximity to the signal producing means in a microenvironment will affect the observed signal. By appropriate choice of the two conjugates in conjunction with the analyte, the observed signal can be related to the amount of analyte in the medium.

Novel conjugates are provided, as well as combinations of conjugates in specific proportions to substantially optimize the assay sensitivity. The combinations are provided as kits, where ancillary reagents can also be included, so as to simplify the combination of reagents, as well as provide for more accurate measurements and relative proportions of reagents.